WebUser

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Issue 390

10 - 23 February 2016

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HACK it so it works with your old software p64

Want to Beat web censorship?

Hate it that the government controls what you're allowed to do on the Internet? You can fight back. Follow our insider secrets and you'll learn how to beat web Censorship.

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Unblock unfairly blocked content

When I was eight years old, my friend Paul got in big trouble with his parents for bringing home an (ahem) adult magazine, which he'd found in the bushes. The severe scolding he received wasn't merely for the inappropriate content of the pervy publication, but because he "shouldn't have been rooting around in the bushes in the first place!".

Nowadays, objectionable material is hosted online rather than stashed in hedges and ISP filters stop us rooting around where we shouldn't – in theory, at least. In practice, as we explain in our cover feature (page 38), these filters can be overzealous and ineffective; blocking harmless sites without explanation and removing the freedom of choice that's integral to the web. If you're tired of being told what you can and can't see online, we have 10 tricks to bypass this unregulated censorship by the government and ISPs. Adults should be allowed to make up their own minds about how they use the web, and not be treated like kids.

Robert Irvine
robert_irvine@dennis.co.uk
#webuser



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abc Average sales, Jan-Dec 2014, 29,057 copies per issue

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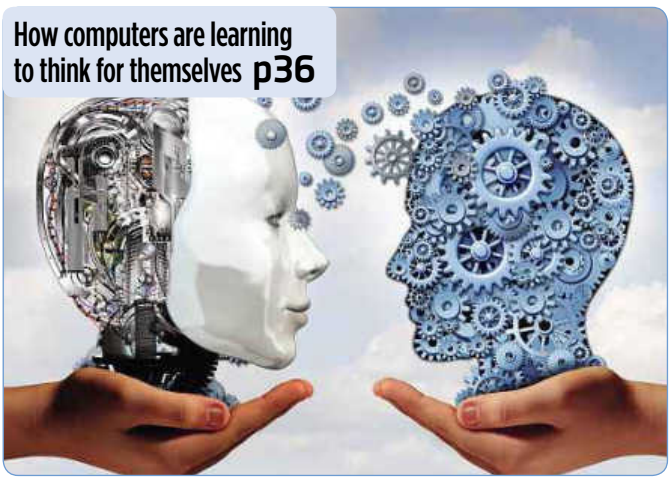
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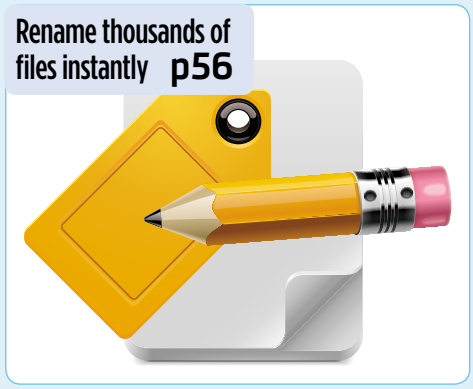
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What's New Online

Search Netflix's entire global library



It's no secret that the UK version of Netflix offers far fewer films and TV shows to watch than its US counterpart, but with the streaming service clamping down on VPNs (see Need to Know, Issue 389), we may soon be unable to see how much worse off we are. We know that this isn't Netflix's fault, and is down to spoilsport licensing restrictions, but it's still annoying that we're paying the same subscription fee for less content.

Three cheers, then, for the unofficial Netflix online Global Search tool (uNoGs for short), which lets you search for film and TV series on every Netflix service in the world, covering 244 countries (yes, we know there are officially only 196). You'll be surprised how many classic titles are available abroad – from *Casablanca* to *Chitty Chitty Bang Bang*.

Enter a title, actor or director to find a match and discover where to point your VPN or proxy tool to start watching. Usefully, you can filter the results by genre, language, English subtitles and year of release, as well as Netflix and IMDb ratings. There's also a What's New section that highlights the latest additions across the board.

Looking at the uNoGs breakdown of countries, it seems the UK's selection isn't actually that bad – 2,417 movies and 561 TV series – but we're still beaten by Uruguay, Trinidad and Tobago, and Barbados, among others. See page 30 for another seaky Netflix tip.

unogs.com

Do you have what it takes to be an astronaut?

bit.ly/astro390

Ever fancied a career with soaring job prospects and the potential to work among the stars? If so, why not see if you have what it takes to follow the trajectory of British astronaut Tim Peake. The European Space Agency, together with its partners in the Netherlands and Sweden, has devised an online Astronaut Selection Test which comprises a number of difficult games that focus on your ability to plan and navigate while examining your spatial awareness and control. It's fun and taxing in equal measure, with your moves needing to be pre-programmed from the perspective of an astronaut and the test taking up to an hour to complete. The results will be used for future astronaut selection, though, so it's all for a good cause.



Comment on Google documents from anywhere

www.google.com/docs/about

As any ardent user of Google Docs, Sheets and Slides knows, the ability to add comments to files was previously only available to Desktop users. Not anymore. A new update for iOS and Android means you can now tap a drop-down menu and insert a comment from smartphones and tablets, too, making collaboration far easier regardless of where you are. Google has also made it easier to leave your missives on the web using a dedicated comments button that appears automatically when you select some text. It's a small but welcome improvement, which Google will have made in response to intense competition from Microsoft's Office 365.



We highlight 10 of the most amazing and amusing things you can do on the web this fortnight

Map the size of football stadiums

bit.ly/pitch390

The goal of Pitch Perfect is not only to map each of the 92 clubs in the Premier League and Football League but to show the size of the pitches the footballers play on, putting Nottingham Forest first and Blackpool last. You can zoom in and out, check out the order via the bookmarks and download a hi-res infographic poster, too. What a result!



Join the search for Planet 9

www.findplanetnine.com

Astronomer Mike Brown was instrumental in downgrading Pluto to the status of dwarf planet in 2006, but he recently unveiled evidence pointing to a different celestial body beyond Neptune that could stake a more legitimate claim to planetary status. Dubbed Planet 9, this new planet is detailed in Brown's new blog in which he explains where in space it will be and the scientific grounding for it. Check out the stunning images and mock movie poster, sign up for the emails, ask questions and keep up-to-date on this most exciting of galactic finds.



Discover more about the Easter Rising

dublinrising.withgoogle.com

To mark the 100th anniversary of the Easter Rising, which sought to end British rule in Ireland, a team of historians, archivists and experts have teamed up with Google to produce an absorbing virtual tour of Dublin. Slap on a pair of headphones and listen to the brilliant, atmospheric commentary while clicking on modern-day buildings to see old archive images, news reels and witness audio.



Climb Mont Blanc on Street View

bit.ly/mont390

Google is scaling ever more dizzying heights in its bid to map the world and you can now take a gander at the highest peak in the Alps. Shot from various parts of this iconic mountain including the summit, the views are breathtaking, and the site lets you to move around using your mouse while drinking in the sights from a variety of angles. Learn more about the fearless explorers who have trekked skywards, explore different maps and watch a compelling behind-the-scenes video.



5 TO FOLLOW ON TWITTER

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Keep up with what's new on BBC Three's digital channel – soon to become an online-only station

@serial
Serial has been called one of the best podcasts ever. Get details of new episodes here

@sportsrelief
Start preparing Sports Relief fundraisers and stay up-to-date

@wefixyouradvert
Hilarious fixes for the most annoying billboard ads around

@bazzacollins
Follow our columnist as he puts the world to rights and raves about Lewes FC

Check aircraft noise around Gatwick

noiselab.casper.aero/lgw

The South East is one of the world's busiest airspaces, which is bad news if you live under a flight path. Gatwick Airport now lets you check surrounding noise levels, using data from ground-based sound monitors.

Explode some kittens

www.explodingkittens.com

No, not real ones! Exploding Kittens is the card game that became the most backed project in Kickstarter history and is now available to play as an iOS app.

Play a new level of classic game Doom

bit.ly/playdoom390

John Romero, the co-founder of id Software, created Doom in 1993 and has now produced a brand new level – his first for 21 years. Get it from Romero's public Dropbox folder and find out how to get it running at bit.ly/doom390.

Need to Know

Unsafe plugin Java to be killed off

What happened?

Java, the browser plugin that everyone loves to hate, is set to disappear from the web after 20 years.

The Java plugin plays 'applets', tiny applications written in the Java language that show interactive or multimedia content, such as online games. It's long been derided for being full of security holes, and has since been surpassed by new HTML standards that perform the same job without the inherent risks.

The plugin's maker, Oracle, said Java will be "deprecated" from September. That means the company is encouraging developers to find alternatives, but is not completely pulling all support, because it will take time for websites to stop using it entirely.

The move isn't a surprise. Major browsers including Chrome, Firefox and Microsoft's Edge have all ended or are in the process of ending support for such plugins, including Java and Flash (see box, below). That's largely because the code of these plugins is full of vulnerabilities that leave users at risk of hacking, and alternatives have long been available built directly into browsers.



For developers who still use the Java language to build applications, Oracle already offers a plugin-free version called Java Web Start (bit.ly/java390).

How will it affect you?

It's more than likely that the Java browser plugin is already dead to you, because you're hopefully using an up-to-date, modern browser. If you're not, you should find a way to update now – it's exactly this sort of ageing software that browser makers are trying to kill off by developing better standards to play content directly in the browser.

Google cut support for Java last year, Mozilla has pledged to remove plugin support in Firefox by the end of 2016 and Microsoft's Edge browser arrived in the summer without support for plugins.

All of this is good news for online security. The Java plugin was a steady source of security vulnerabilities, including the dreaded zero-day flaw in which holes that companies aren't aware of yet are found and used by hackers. Removing such weak spots in our browsing experience is the right route to making the web safer.

What do we think?

It's easy to mock dying technologies and forget how much we once relied on plugins. The web would have been a much less interesting place without them, before the advent of HTML5 and standards connected to it, that embed the ability to play video and other content directly in the browser without a plugin.

But plugins such as Java, Flash and Silverlight have certainly deserved criticism in recent years, with their makers failing to keep them secure. Such technologies were left to rot by their developers, leaving web users less safe with every passing day. Hopefully, the companies behind the browsers, software and other tech that keep the web running smoothly have learned from the mistakes of Oracle, Adobe and Microsoft, and are building systems that evolve to become safer, rather than the other way around.

OTHER DYING PLUGINS



It's not only the Java plugin that's facing imminent death. At the end of last year, Adobe announced that it was dropping Flash in favour of its own Animate Creative Cloud system, pushing developers to use HTML5 rather than plugins for animated or multimedia content. Like Java, Flash was an essential plugin during the web's early days that allowed multimedia content to be played, but it's since become a security risk. Back in 2010, Apple's Steve Jobs said iPhones would never use it, and Android dropped support two years later.

Microsoft's media-playing plugin Silverlight was developed to rival Flash and it's also on the way out. Silverlight is not supported by Chrome, or the Android and iOS mobile platforms, and even Microsoft's own Edge browser arrived without support. It's technically still receiving updates from Microsoft until 2021, but at this rate there won't be many users by then.



The demise of these plug-ins wasn't triggered by the companies in question, but developers switching to better, safer alternatives – our only complaint is they didn't move more quickly.

What we think of this fortnight's top tech news stories and rumours, and how they affect you

Parents warned about 'smart' baby monitors

What happened?

Parents have been warned by US officials about the dangers of using web-connected baby monitors, following a series of incidents in which the devices were accessed by hackers, who used them to shout at and spy on children.

The Department of Consumer Affairs and the Federal Trade Commission have both launched investigations, with the FTC reporting that four of the five brands it examined were easy to hack.

Such incidents aren't limited to the US. Last year, a Russian website was streaming feeds of baby monitors and internet-connected cameras, some of which were located in the UK.

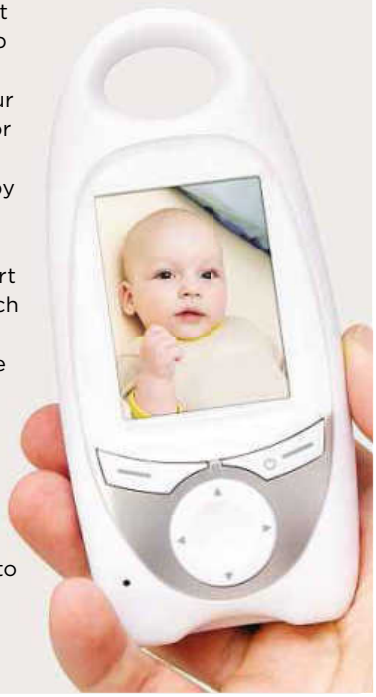
How will it affect you?

It's wise to make sure that any smart device is set up in a secure manner, whether it's watching your children, car, front door or anything else.

The guidelines issued by the US authorities are a good start. They advise that before buying a smart monitor, you should search the brand online to see if it's been reported to have any security flaws. When you choose a device, always reset the password because default credentials are often shared online and can provide easy access to hackers. And you should always employ best practice for passwords, such as choosing a strong one and not reusing it elsewhere. Also, take the time to register the monitor with the manufacturer, so you get all the latest updates, then make sure you actually install them. As ever, if you have friends or family using such devices, make sure you share this advice with them, too.

What do we think?

Smart devices such as web-connected baby monitors are certainly convenient but some gadgets from the so-called Internet of Things are more trouble than they're worth. The bottom line is that you can't trust technology companies to make the effort to keep their users secure, so make sure you take the responsibility to do so yourself.



BT criticised for 'dire' broadband service

What happened?

MPs have called for BT to split from its Openreach arm, after millions of broadband customers were found to be suffering from "dire internet speeds". Openreach is part of BT, but sells access to broadband and phone infrastructure to other internet providers, and is leading efforts to roll out superfast broadband. The report from MP Grant Shapps, dubbed "Broadbad", said more than five million Britons were failing to get acceptable download speeds and that the service was suffering. The report added that the only way to address this was by ending the "natural monopoly" of BT and Openreach.

This comes alongside a report from the Home Builders Federation, which said Openreach was failing to connect new homes to the network, leaving new residents without broadband.

BT has repeatedly said that separating Openreach would cause "uncertainty" in the market and reduce the amount of investment in British broadband.

How will it affect you?

Spinning off Openreach is a massive move that will have far-reaching repercussions in the UK broadband market. That said, Openreach doesn't deal directly with consumers. You'll still buy broadband from BT or one of its rivals, and it will still be managed by Openreach engineers – they just won't work for the same boss.

It's believed that splitting the pair will boost competition and improve customer service, something BT and Openreach have been criticised over in the past. However, with BT nervous about losing Openreach, executives have made promises to improve service – so broadband installation times and support calls may improve.

What do we think?

Should BT and Openreach divorce? It's a tough call. No matter what happens, five million homes on too-slow broadband is unacceptable, as is consistently poor service. Whatever the decision, it's vital that Britain's broadband infrastructure receives solid investment and that the service improves. Broadband is too important to all of us to be in such a troubled state.

Facebook app ‘uses 20% of battery life’

What happened?

Facebook is looking into claims that its Android app hogs up to 20% of the battery power on phones and tablets.

Even when running in the background, Facebook’s Android software could be significantly impacting battery life and performance, according to Guardian writer Samuel Gibbs (bit.ly/guardian390). In his article, Gibbs claimed that after uninstalling the app, his Nexus 6P saved an extra 20% of battery life on average each day, measured over a week.

The experiment was prompted by findings from Android specialist Russell Holly (bit.ly/holly390), who had reported improved performance after removing the software.

The reason Facebook’s app affects performance and battery life so much is apparently to do with the way it interacts with Android’s core systems. Gibbs stated that while the app itself was not drawing an excessive amount of power, uninstalling it resulted in the Android System and Android OS processes showing significant decreases in battery demand.

This indicates that the problem stems from Facebook’s deep integrations with Android itself, which it uses for exchanging various bits of data and pulling notification information.

A Facebook spokeswoman said: “We have heard reports of some people experiencing speed issues stemming from our Android app. We are looking into this and will keep [users] posted. We are committed to continuing to improve these issues.”



Facebook’s various mobile applications have been a frequent target of criticism in the past, and it isn’t known how long the current reported problem will take to be resolved.

How will it affect you?

If you can’t live without Facebook, but you’re frustrated by it greedily guzzling your battery power, try accessing the social network through your mobile browser instead. You’ll still get full access to the site, and be able to receive notifications and chat to friends via Messenger, but the juice on your phone will last a lot longer.

What do we think?

We’ve highlighted the Facebook app’s excessive battery consumption before, so we’re not surprised by the latest reports. The problem, apparently, which affects iOS devices as well as Android, is that the app is ‘always on’ and running in the background, which means it uses a lot more power than you realise. Hopefully, Facebook will do something to fix this soon because poor battery life on smartphones is already one of the major gripes reported by users.

FIRST LOOK

Vodafone Tab Speed 6

bit.ly/vodafone390

Vodafone’s Tab Speed 6 is a budget 8in tablet that’s available for just £125 on Pay as You Go (including 6GB of data that’s valid for 30 days). Despite its low price, the device doesn’t look or feel particularly cheap, but the high-spec veneer ends there. It’s powered by a weedy 1.3GHz quad-core chip and comes with only 1GB of RAM, making it suitable for emails and basic web browsing but no good for more graphics-intensive tasks such as playing 3D games.

The tablet has a 5MP back camera and a 2MP camera for snapping selfies. Although taking photos isn’t a priority with tablets, we were disappointed to discover that the back camera has a fixed focus (meaning it’s only good for shooting objects in the middle distance). What’s more, we couldn’t find a shortcut to the Gallery within the default camera app, which made finding the photos we’d just taken unduly tricky!



On the plus side, the Tab Speed 6 runs Android 5.1.1 (Lollipop) and it’s 4G-ready, making it perfect if you want a cheap, robust tablet for using on the go. Indeed, you’ll find all the usual Google apps such as Gmail, YouTube, Drive, Chrome, Docs and Calendar, and, unlike Amazon’s Fire Tablet, you can download thousands more using the Google Play Store.

Storage space isn’t a problem because the device’s 16GB capacity can be expanded by up to 64GB using a microSD card. We were also impressed by the clarity of the 1280 x 800 IPS display, even though this is a much lower resolution than similarly priced tablets including the Asus Memo Pad 7 ME572C and the Tesco Hudl 2.

Overall, there’s nothing remarkable about Vodafone’s new budget tablet, and we think there are both cheaper (Kindle Fire HD 6, £80) and more expensive (iPad Mini 2, from £219) devices that represent better value for money.

WHAT'S THE RUMOUR

Will the next version of Android be called Nougat?



Many Android users are still waiting patiently for their devices to be updated to version 6 of the mobile operating system, better known as Marshmallow, but there's already speculation about version 7, especially over it's name.

Google has a sweet tooth when it comes to naming its Android OS updates, calling every stable version of the mobile OS after a sugary treat: Cupcake, Donut, Eclair, Froyo, Gingerbread, Honeycomb, Ice Cream Sandwich, Jelly Bean, KitKat, Lollipop and Marshmallow. So N is very likely to stand for something sweet, with the top contenders at the moment being Nougat, Nectarine and Nutella.

Android M was announced at Google's I/O 2015 conference and it seems logical that the company will take a similar approach to Android N and launch it at I/O 2016, which takes place 18-20 May. Later in the summer, Android N will get a name; then, around October, the update will start to roll out officially.

As for which phones will get Android N, it's very likely that Google will release a new Nexus phone with the OS update pre-installed. Soon after that, Android N will make its way on to older Nexus phones and tablets, then on to other Android devices from the likes of Samsung and HTC around the beginning of 2017.

LIKELIHOOD RATING

✓✓✓✓✓

Android Nougat has a good ring to it so we're going to stick our necks out and predict that's what version 7 of the software will be called. The updates to the OS, however, are getting a bit predictable year after year, so hopefully Android N will introduce more interesting features than Marshmallow has.

GO What's new on Indiegogo

Our favourite new project on the crowdfunding site

Jiffy

bit.ly/jiffy390 | From $15 (£10.42)



Smartphone batteries are notoriously rubbish (especially if you use Facebook – see story, opposite) and always seem to run out when you're nowhere near a power point. Eco-friendly charger Jiffy provides the perfect solution to this problem by letting you generate juice simply by turning its handle, with no electricity, batteries or solar rays required. The compact gadget fits snugly into your pocket, works with Android and iOS devices, and can even be used as a light source during a power cut. The Jiffy team hopes to raise $5,000 for the project by 22 February.

WEBOMETER

WE LIKE...

Samsung introduces support for ad blockers

Samsung has introduced ad blocking to its mobile browser for the first time. Users require version 4.0 of the app and third-party ad-blocker Adblock Fast to take advantage of the new feature.

Spammer jailed for sending illegal texts

A man has been sentenced to 27 months in federal prison for sending millions of spam text messages to US and international mobile phones. Hopefully this will be a lesson to other spammers.



WE DON'T LIKE...

Three increases monthly fees

Three has caused uproar after announcing that it will be phasing out some of its old plans, resulting in much higher monthly payments for some customers – as much as double in certain cases.

Expedia bug leaves customers out of pocket

An "unprecedented" technical glitch on Expedia's website resulted in some customers being charged multiple times for their holidays, which in several cases led to their bank accounts being frozen.

Stay Safe Online

News about the latest threats and advice from security experts

SECURITY ALERT! | What's been bothering us this fortnight

HSBC online banking crippled by cyber-attack

HSBC's online banking service was knocked offline by a distributed denial of service (DDoS) attack on 29 January, leaving customers locked out for most of the day. The hackers flooded the bank's servers with requests from a large network of computers, probably made up of regular PCs infected with malware.

The latest attack follows a two-day online-banking outage earlier in the month. Mark James, a specialist from internet security firm ESET, told IT Pro: "DDoS attacks, regardless of motive, are never any good for any organisation. Its users may vote with their feet rather than be understanding and stay with them". The latest attack lasted less than a day and no customer records or transactions were compromised. HSBC has said that it is working with police to identify the culprits.
bit.ly/hsbc390

Nasty Android ransomware pretends to be porn

Symantec has revealed that Android.Lockdroid.E ransomware could be installed on as many as two thirds of all Android devices, posing as a porn app called Porn 'O' Mania. The malware uses a fake package installation to trick users into thinking that it needs to access vulnerable parts of your phone in order to deliver pornographic material. However, giving the app these rights lets hackers act as remote administrators.

Once installed, the app locks the device, gathers contacts and encrypts other data, demanding that the user pay to unlock it again. The malware is blocked from the Google Play Store so as long as you're only downloading Google-verified software, you should be completely safe.
bit.ly/android390

Firefox fixes critical security flaws

Firefox users should check that their browser has updated to version 44, to ensure they're browsing the web safely. The update fixed 12 security flaws that left its users open to attack. Three patches were listed as 'critical', fixing problems with Firefox's use of your computer's memory. Two more were considered high-risk and could expose personal data – one could even create a fake address bar to hijack your browser and deliver websites containing malware. Firefox should automatically apply updates but, to check you have the new version, click the Menu button, then the '?' button and choose About Firefox.
bit.ly/ff390

Security Helpdesk | Your questions answered by security specialists

THIS ISSUE'S EXPERT: Robert Capps, VP of business development at NuData Security (nudatasecurity.com)

Q Following the HSBC hack (see above), are online-banking services as safe as they claim?
Holly Sinclair, via Facebook

A It's important to understand that DDoS attacks are not direct attacks on the accounts at financial institutions; they are attacks on the public image and consumer goodwill toward those institutions. They are designed to harass, intimidate and embarrass a targeted company, but the DDoS attacks rarely result in any lasting impact on individual accounts.

Online banking is still incredibly safe for consumers, and brings with it a level of convenience that was previously absent from traditional banking channels. At one time, you may not have known about improper access or transactions on a financial account until you were sent a bill or statement at the end of the month.

> "Regardless of DDoS attacks, online banking is still incredibly safe for consumers"

DDoS attacks are not meant to directly steal from consumers, they are intended to deny them access to the online service. Bank accounts remain available via other channels even during a crushing DDoS attack, and consumers may visit a bank branch, place a phone call to their bank or use their normal payment cards during such an attack. Sadly, there are few effective systems in place to fully protect companies from the effects of a DDoS attack.

On a more worrying level, we've seen recent DDoS attacks against banks used as a smokescreen for other nefarious activities, such as cyber-heists on a targeted institution. Time will tell if the HSBC cyber-attack is simply a DDoS attack or a cover for a more damaging intrusion into their systems.

+ Email us your security questions at webuser@dennis.co.uk



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Best New Websites

Site of the Fortnight

BOOKS

RELAUNCH

Penguin

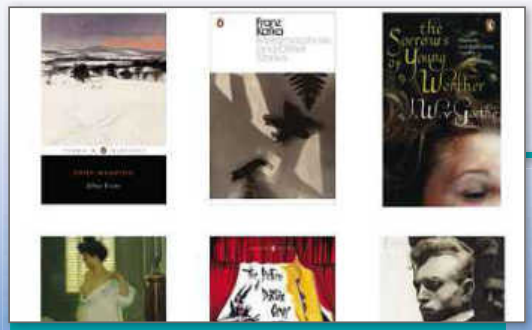
www.penguin.co.uk

Penguin has created an impressive new chapter for its website that lets avid readers get more from the publisher's books. Although its primary aim is to encourage you to buy paperbacks, hardbacks and ebooks, this easily navigable site has lots of free extracts to enjoy, insightful articles to peruse and lists that introduce you to new and classic gems. But it's the behind-the-scenes information in author podcasts, videos and Q&As that make the site stand out. Given Penguin's 81-year-old history, there's more than enough fascinating material for it to draw on to make the site well worth bookmarking.

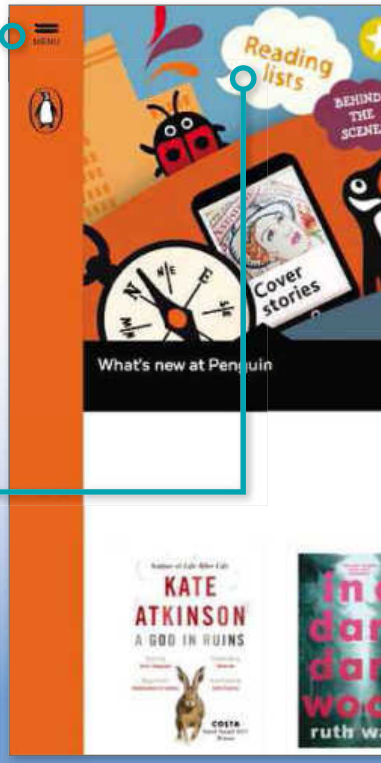
Our rating ★★★★★



PUFFIN
The Puffin section is aimed at young bookworms, with games, audio and video



READING LISTS
There are lots of articles suggesting groups of books that you may be interested in





NEW

ALCOHOL

Aldi Wine

www.aldi.co.uk/wines

Low-cost supermarket chain Aldi is known for selling some surprisingly good wine, but previously you had to visit the store in person to stock up. One £35m investment later and it's uncorking its bottles for everyone – provided you're prepared to buy by the case. There are more than 100 wines to choose from – 55 of which are red (and four rosé) – and selecting them is as easy as clicking colour-coded icons. There's no buying advice, but you can filter wine by country, grape, price, awards and ratings, and read detailed info about each bottle, including a food match. You can also read customer reviews to get a taste of what you're buying.

Our rating ★★★★☆



NEW

CHARITY

Time for a Cuppa

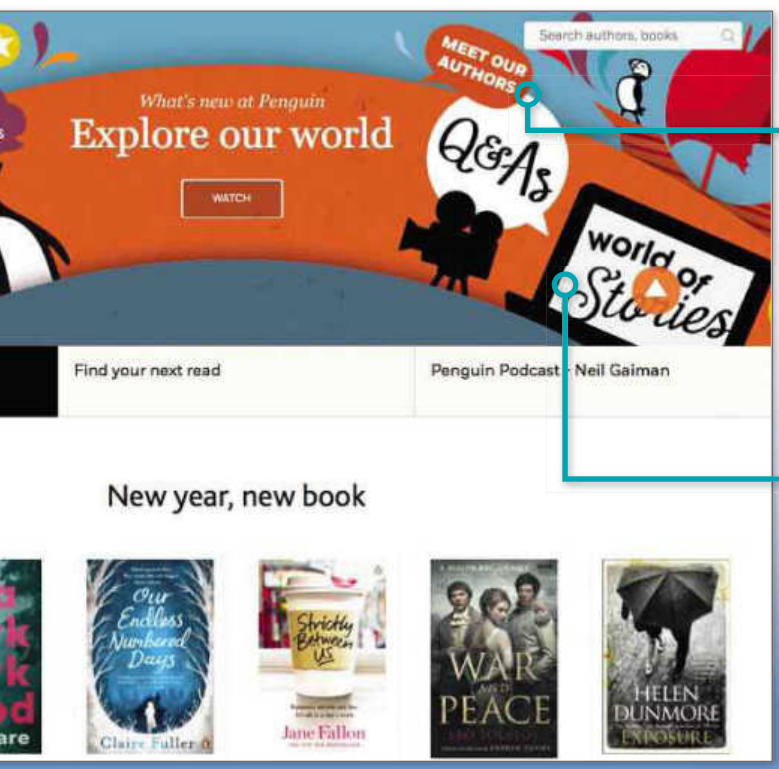
bit.ly/cuppa390

Dementia UK is running the fundraiser Time for a Cuppa from 1 to 8 March to raise money to pay for more Admiral Nurses and increase support to affected families. This site invites you to register your fundraising event, view some mouthwatering recipes (with more available when you sign up) and download posters, cake toppers, Gift Aid guest lists, games and info cards. The homepage is a bit plain and blog-like, but the lack of design is more than made up for by the admirable aims of the Cuppa campaign and the wealth of information the site provides.

Our rating ★★★★☆

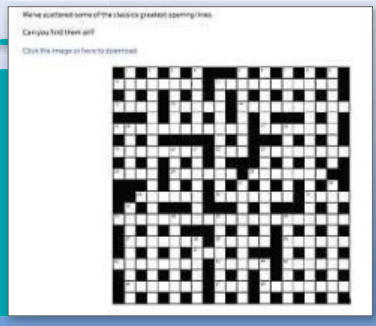
Reviews by David Crookes

We review this fortnight's best new and relaunched websites and rate them for content, design and features





AUTHORS
Prominent authors get their own pages with links to websites, videos and interviews



PUZZLES
Penguin hopes to engage visitors in the site via some literary-themed puzzles



RELAUNCH

TELEVISION

Sky Go

go.sky.com

Sky Go's website used to focus on the service's live-broadcast programmes, so the homepage contained little more than the current schedules for the various available channels. That's now changed for the better. The revamped site includes more on-demand viewing, with catch-up highlights placed centre stage in a simpler, bolder, layout full of eye-catching icons. You can still watch live TV via the On Now tab, but it's now much easier to find content. And although you need the outdated Silverlight plug-in to watch shows, the viewing experience is fast, slick and easy to get to grips with.

Our rating ★★★★☆



NEW

TECHNOLOGY

Raspberry Pi Education

www.raspberrypi.org/education

Although it's aimed at educators, this new section of the ever-expanding Raspberry Pi Foundation's website is a great resource for fans of the tiny computer. The design is fun yet professional, with simple navigation and useful tools. The monthly newsletter is perfect for a quick catch-up and includes in-depth features on how the Pi benefits schoolchildren and the wider world. With free educational resources that can be tried at home and a full events calendar, the site does a great job of proving that the Pi is more than just a cheap computer.

Our rating ★★★★★



RELAUNCH

HEALTH

GP Patient Survey

gp-patient.co.uk

Every year, a million patients in England are asked to complete a survey about their GP, but did you know that this data is made publicly available? This site has the latest national figures and lets you search for your doctor by name or postcode to see how they fare. By breaking down a practice by what it does best and how it can improve, you can compare figures with the local and national average. You can also see how many surveys were submitted, export data, see infographics and use the analysis tool. Even if you're happy with your GP, it's an interesting browse.

Our rating ★★★★☆



NEW

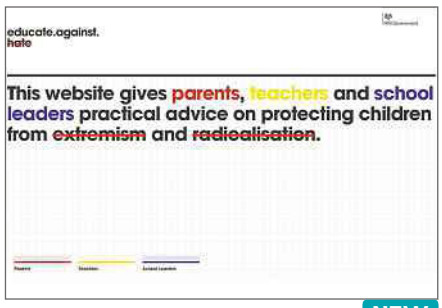
LIFESTYLE

Everyday Lovely

everydaylovelybylorraine.com

Created by US actress and producer Lorraine Toussaint from the Netflix comedy drama *Orange Is The New Black*, this site aims to celebrate the loveliness we encounter in everyday life. Its lifestyle advice about topics such as living, dining and parenting draw on Toussaint's personality and experience while offering recipes, ideas and anecdotes. There's certainly lots of content, most of it chatty, friendly and heart-on-sleeve open. Yet some of the writing feels waffly and self-indulgent and the design – despite some slick photography – needs tightening up. You have to be a fan to enjoy it, really.

Our rating ★★★☆☆



NEW

POLITICS

Educate Against Hate

www.educateagainsthate.com

With the worrying rise in extremism and radicalisation among children, the government has launched this site to tackle what it calls the "spell of twisted ideologies". The result is undoubtedly comprehensive yet feels overloaded with reams and reams of text. It could benefit from having a single overview page of facts and advice for the three categories of people it targets: parents, teachers and school leaders; and could do with some bite-size videos or infographics. As it stands, the site's smart design is undermined by the excess of content, which is such a chore to wade through that it may put off many visitors.

Our rating ★★★☆☆



RELAUNCH

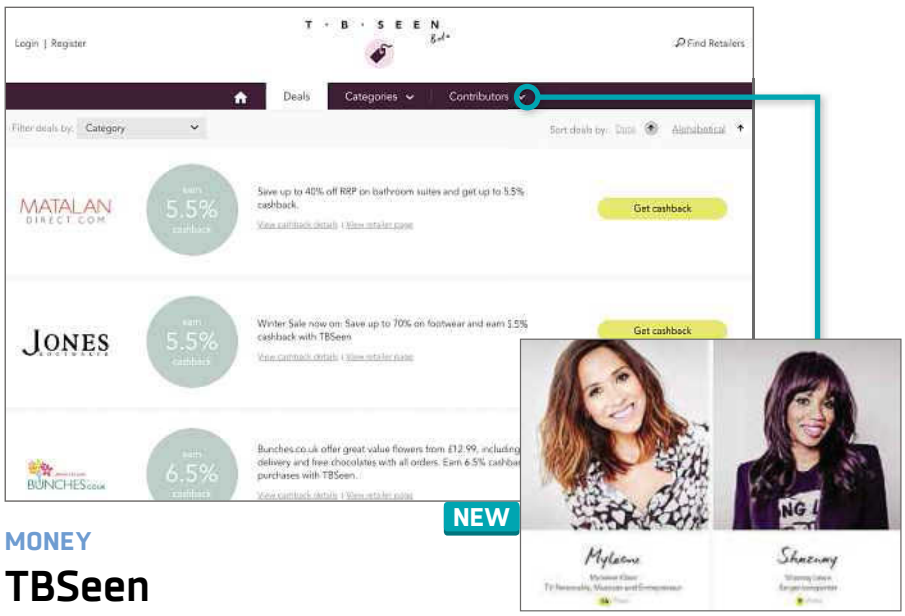
INNOVATION

21st Century

www.21stcentury.co.uk

This website launched in 1999 and, in its latest incarnation, shares knowledge about science and technology like never before. It's well-organised and clean with thought-provoking articles and high-standard photos. Yet it's a strange offering. There's lots of brilliant and varied stuff to read and stories are placed within a solid selection of topic areas ranging from digital to space to quantum but, at the time of writing, every article was posted on 1 January and there have been no updates. This won't stop us checking back, though, because the site has lots of potential if it manages to keep its content fresh.

Our rating ★★★★☆



NEW

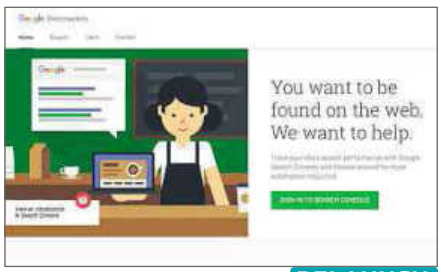
MONEY

TBSeen

tbseen.com

TopCashback and Quidco have long dominated the online cashback market, but TBSeen hopes to bring something new to the table by targeting women. The site has launched to much fanfare and glamour, having signed up a host of celebrities including TV presenters Kate Thornton and Myleene Klass to appear in videos and blog posts. TBSeen's main purpose is to offer savings across categories such as Style, Entertainment and Beauty and, although it covers a lot of brands, it could do with better flagging of its deals. Also, the site's retention of up to 20% of the cashback earned compares unfavourably with existing rivals that pay out higher levels.

Our rating ★★★☆☆



RELAUNCH

INTERNET

Google Webmasters

www.google.com/webmasters

Getting noticed and looking your best are aims at the heart of all forms of marketing, and promoting a website is no different. If you're running your own website, Google Webmasters can help you to produce outstanding results and ensure that your site can be found, indexed and ranked by search engines efficiently. This revamp adds a webmaster troubleshooter, popular resources and an event calendar, and includes useful info in its Webmaster Academy and Webmaster Guidelines sections. We particularly like the mobile-friendly test and the section on SEO. Best of all, this essential resource is entirely free.

Our rating ★★★★★



WebUser

COMING SOON

2015 BACK ISSUES DISC



Our 2015 Back Issues Disc containing all 26 issues from last year will be on sale soon

The 2014 Back Issues Disc is still available from bit.ly/webusercd



Build a Better Site

Specialist tips, top tools and practical help

Top Tips of the Fortnight

Get Ecwid on Android

Ecwid (www.ecwid.com) is one of the best tools we've seen for managing a small online shop. It's just added an Android app to its excellent collection of tools, so you can use it on a mobile device when you're away from your desk. It lets you manage and contact your customers; change payment and delivery status; and edit product information. Get the new Android app from bit.ly/ecwand390 or download the iOS version from bit.ly/ecwios390.

Better site graphics with Content Creator

Content Creator (free for iOS from bit.ly/cont390) is like having a designer built into your iPad or iPhone. Choose a picture from your device and use Content Creator to perform simple edits, such as changing the saturation, brightness and contrast. You can then add a message with attractive professionally designed



text and graphics. The app is aimed at people who want to use graphics for social-networking posts, so it includes links to directly send your images to Facebook and Twitter, but you can also save them for using on your website.

Deal of the Fortnight

Easyspace (www.easyspace.com) is offering 25% off '.info' and '.org' domain names, with prices starting at £12 for a one-year '.info' hosting.

Web-building Helpdesk

Eugene Molari, Project Manager, Wholegrain Digital (www.wholegraindigital.com)

Q Are WordPress websites safe? What precautions can you take to stop hackers taking them over?

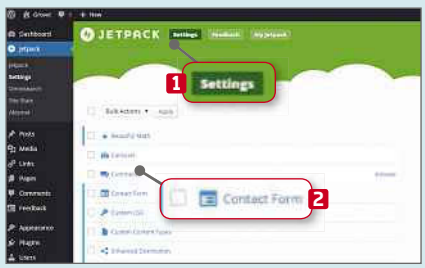
Mark Blake, via email

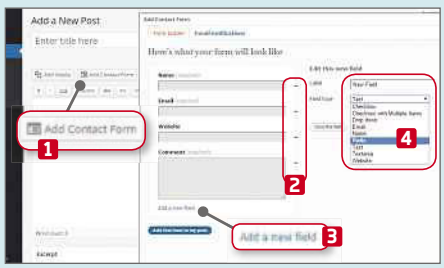
A Websites are as safe as their weakest link. There are a few things you can do to keep the bad guys away. Use strong passwords for all the user accounts on your site. LastPass (lastpass.com) has a password generator for this purpose. Keep your installation as up to date as possible, updating the core, themes and plugins (bit.ly/update390). If you use any freeware, make sure it comes from a reliable source. Use a WordPress-dedicated and reliable webhost, such as Flywheel (getflywheel.com). Wordfence can teach you more at www.wordfence.com/learn.

MINI WORKSHOP | Make simple, safe contact forms with Jetpack in WordPress

Jetpack: jetpack.me | 10 mins | Requires website running WordPress

Comments on websites and blogs are becoming unpopular because they can attract trolls and spam. Jetpack for WordPress creates a contact form so your visitors can communicate with you quickly and safely.







1 If you don't already have it, install Jetpack from jetpack.me. Log into your WordPress blog and, from the Jetpack menu, choose Settings. 1 Find Contact Form 2 and make sure it's highlighted in blue. If it isn't, hover your mouse over it and click the Activate link.

2 When making a new post, move the cursor to the position in the main text where you want it to appear and click the Add Contact Form button. 1 A sample form appears. Remove any options you don't want by using the minus buttons 2 or click 'Add a new field' 3 to add another element and configure it on the right. 4

3 You can manage your feedback from within WordPress but, if you want to get an email alert, switch to the 'Email notifications' tab. 1 Fill in the email address you'd like the alert sent to 2 and what you want displayed in the subject line. 3 To send the alert to more than one email address, separate each one with a comma.

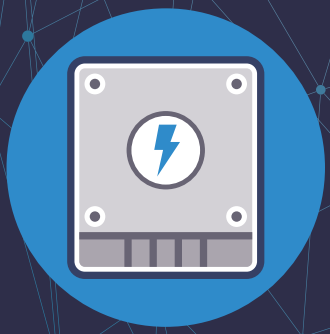
+ Email us your website building questions at webuser@dennis.co.uk

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Group Test

We test and compare the latest products

Compact PCs

If you don't have enough space on your desktop for a tower, you don't have to opt for a laptop. **Andy Shaw** tests a selection of compact and affordable desktop PCs

Desktop PCs conjure up images of huge, imposing tower boxes, crammed with the latest components and costing hundreds of pounds. But, increasingly, manufacturers are producing small desktop computers that can neatly be tucked away at the back of your desk or hidden alongside your TV. In this Group Test, we've taken a detailed look at five compact and affordable PCs.

If you'd prefer a computer with a bit more power and don't mind spending extra, there are higher spec PCs that come in compact cases, too. We've rated eight of the best on page 22.

HOW WE TESTED

We put all the PCs (except the Asus Chromebox) through their paces using our Windows benchmark suite, which gives an overall score based on a series of tests including office tasks, image editing and video encoding.

We also tested their ability to play Full HD 1080p video without stuttering, and ran our Dirt Showdown gaming benchmark to see if they managed to run the latest games.

Acer Revo One RL85 | £269.99 | www.ebuyer.com

FEATURES ★★★★★ PERFORMANCE ★★★★☆ EASE OF USE ★★★★★ VALUE FOR MONEY ★★★★☆



Most compact PCs opt for a flat, square design, but the The Revo One has broken with tradition. Its cuboid case has rounded corners, and comes in glossy white or black. The design is attractive enough to make a feature of your compact PC, but it's still small enough to hide away if you'd prefer not to see it.

Despite its small size, Acer has provided enough room in the Revo One to host three 2.5in hard drives, so you could squeeze as much as 6TB of storage into the device. This would be ideal for storing an extensive movie collection within easy reach of your TV, for example.

Our review unit came with a single 500GB drive, but Acer supplies a range of different options, including an SSD drive for fast booting. If you want to add extra drives later, a button on the back exposes the spare slots for plugging in the new drives, though the main system drive needs a screwdriver to release it.

There are other configuration choices available, with different processor and memory options. The cheapest model with a Celeron processor and 2TB hard drive costs around £230. Our test configuration had a dual-core 1.7GHz Intel Core i3-4005U with 4GB of memory. It came a very close third in our Windows performance tests, only one benchmark point short of the second-placed HP model. It has a good selection of ports and connectors, including Gigabit Ethernet, but the built-in Wi-Fi is a bit disappointing because you're limited to 802.11n

Our review model came with a wireless keyboard and mouse that matched the glossy white PC box. Both devices are compact and the mouse is comfortable to use, but the keyboard had a spongy feel to it that we didn't particularly like, though it's fine for typing web addresses and performing quick searches.

VERDICT

★★★★★

Although other compact mini PCs and home-theatre machines tend to sacrifice storage capacity for smaller dimensions, the Acer Revo One RL85 doesn't force you to choose one or the other, and provides room for extra storage if you decide to expand it at a later date. Performance is respectable and the unorthodox design is attractive and clever. It's more expensive than the silver award-winning Dell, but it performs much faster and its increased flexibility gives it a further edge.

Dell Inspiron 3050 Micro Desktop | £189 | www.dell.co.uk

FEATURES ★★★★☆ PERFORMANCE ★★★☆☆ EASE OF USE ★★★★☆ VALUE FOR MONEY ★★★★★



Dell's Inspiron 3050 Micro Desktop is a small and inexpensive PC, but it's also a proper Windows computer, made to a reasonable specification, which is a remarkable achievement given its low price.

The smart, black case has matt sides with a glossy top, and is just slightly smaller than a stack of CD boxes. In fact, it's the smallest of the compact PCs in this test, bar the tiny MSi Cubi.

It has a useful selection of ports, including four USB: a USB 3 and a USB 2 on the front, plus two more USB 2 ports for the keyboard and mouse on the back. It has Gigabit Ethernet and 802.11ac Wi-Fi, and an SD card-reader slot on the side.

The PC comes with a wired USB mouse and keyboard. The mouse is fine but the keyboard's keys are a bit wobbly, though it's adequate for the kind of casual use we would expect from a PC like this.

We found that the pre-installed software (Dell Backup and Recovery Toaster) took a big toll on the PC, slowing the boot-up and hogging a significant chunk of the small 32GB SSD. Removing it helped a lot, and provided a performance boost, but it was still the worst performing PC in our test (except for the Chromebox, which can't run Windows benchmarks). We had no problems playing back 1080p video, though.

Even without the unwanted software, this is not a PC for playing the latest games. We tried running our Dirt Showdown frame-rate test but only got it to a playable 31fps (frames per second) by turning the resolution down to a retro-looking 800 x 600 pixels.

Storage space, too, is limited, so you'll need to use online storage or get an SD card to boost what you've got.

VERDICT ★★★★☆

We're impressed with the Dell Inspiron 3050 Micro Desktop. The £189 price tag is a bargain for such a well-designed and usable PC. It even comes with a half-decent keyboard and mouse. It's a shame it doesn't have more built-in storage, and you'll have to uninstall Dell's software to get acceptable Windows performance, but if you just need a PC for simple tasks, it's a good buy for the price.

Asus Chromebox | £185.99 | www.ebuyer.com

FEATURES ★★★☆☆ PERFORMANCE ★★★☆☆ EASE OF USE ★★★★★ VALUE FOR MONEY ★★★★☆



Chrome OS is normally associated with budget laptops, because the lightweight operating system and browser-based applications are well suited to modest computing needs. We've not seen many desktop Chrome computers, but this Chromebox from Asus proves that a Chrome desktop PC can be a worthwhile purchase.

It's a well-designed mini PC, with a footprint that's a little smaller than a CD case. The dark metallic-blue top and sides look classy and don't give away the PC's cheap origins. Its tiny size means it can fit practically anywhere: on a desk, on the back of a monitor (with a mount) or even in your TV cabinet if you fancy a dedicated web-browsing PC in the living room.

Despite its small chassis, it has a good collection of ports, including HDMI and DisplayPort for your monitor, Gigabit Ethernet and two USB 3 ports on the back. There are two USB 3 ports on the front and an SD memory card slot on the side. It also has dual-band 802.11n Wi-Fi built-in.

It comes with a wireless keyboard and mouse, but you'll need to sacrifice one of your ports to insert the USB dongle. The mouse is tiny but reasonably comfortable to use. The keyboard looks like its design has been lifted straight from a compact Chromebook laptop, and we would have preferred to have something larger, since it doesn't need to be constrained by the proportions of a laptop case.

You can't run Windows applications on your Chromebox but, as long as you have a decent internet connection, there are plenty of online alternatives. As a result, there's only 16GB of storage built in, but Chrome OS isn't designed to store files locally – you have to come around to the idea of storing everything in the cloud. It's also the cheapest computer in this test.

VERDICT ★★★★☆

The Asus Chromebox is a bargain mini PC, undercutting most of its Windows-powered rivals in price, while still offering capable performance and reasonable specifications. There are limitations with an operating system that's so reliant on the web, but since it's so easy now to get a large amount of your computing done online, the trade-offs aren't as severe as they used to be. It's not for everybody, but if your demands are modest, the Chromebox is a good option at a great price.

HP Pavilion Mini | £334.93 | www.laptopsdirect.co.uk

FEATURES ★★★★☆ PERFORMANCE ★★★★☆
EASE OF USE ★★★★☆ VALUE FOR MONEY ★★★☆☆



The HP Pavilion Mini has a classy grey and silver colour scheme, with smooth, rounded corners. It's the best-looking design of all the mini PCs we've reviewed here.

Inside there's a 1TB hard drive, 4GB of memory and a dual-core Intel Core i3-4025U processor running at 1.9GHz, similar to a budget laptop. Day-to-day performance was good in our tests, coming second in our Windows benchmark results, though you'll notice some slowdown if you try to do too many things at once. It also played Full HD video smoothly.

It doesn't compare that well to our award-winners, though. The lack of a keyboard and mouse makes the Dell a significantly cheaper option, while the Acer provides more storage if you're after a media PC to sit by your TV. And if all you want to do is get online, then the Chromebox is a much cheaper option.

VERDICT ★★★★☆

The HP Pavilion Mini is a good mini PC for modest use, and provides some room for tweaks and upgrades. The addition of a keyboard and mouse could make it a good office PC, but the lack of any bundled peripherals leaves it a little wanting.

MSI Cubi | £221.66 | www.lambda-tek.com

FEATURES ★★★☆☆ PERFORMANCE ★★★★★
EASE OF USE ★★☆☆☆ VALUE FOR MONEY ★★★☆☆



The MSI Cubi is a build-it-yourself PC. The tiny case is about the size of four slices of bread and comes with just a motherboard and processor, leaving you to source and install the storage and memory. Its limited components come in a variety of types depending on how much you want to spend – you could get one with a Celeron processor for as little as £99, though our review model had an Intel Core i3-5005U. Equipping it with 4GB of memory and a 128GB SSD bumped up the overall price to around £361.

This configuration was good enough to run basic Windows tasks, simple browser games and even Minecraft, to an acceptable degree. It topped our Windows performance benchmark test with relative ease. More serious games will still struggle – we had to reduce the detail for our Dirt Showdown test and dropped the resolution to 1,280 x 720 pixels in order to maintain a decent 31.1fps.

VERDICT ★★★★☆

The MSI Cubi is a little expensive considering you need to add storage, memory and an operating system, though it might make an interesting project. For less money, though, you could get a fully functioning Dell or an Asus Chromebox.

BEST OF THE REST

Most higher-spec compact PCs are specifically aimed at gamers and the cases of the eight higher-priced compact PCs are significantly larger than the five computers we've reviewed above, although they still take up much less room than a tower PC.

Our favourite in this category was the **Palicomp Intel i5 Raven (£700, www.palicomp.co.uk | ★★★★★)**. Measuring 382 x 350 x 105mm, it's quiet and has enough grunt for the latest games titles. It's not much more expensive than a similarly specified full-size desktop and includes a gaming controller, so it's ready to use as soon as it's out of the box.

If you can afford to spend even more, the **Mesh Elite Voyager Mini CS (£999, www.meshcomputers.com | ★★★★☆)** is a seriously powerful device, with a performance unmatched by any of the other mini PCs in this Group Test. It doesn't come with any accessories and it's a bit of an odd size (374 x 250 x 210mm), but if you're after a micro powerhouse for under £1,000, look no further.

The **Chillblast Fusion Nano 970 (£999, www.chillblast.com | ★★★★☆)** looks fantastic and is extremely powerful, although the Mesh and Wired2Fire models proved to be faster. However, if saving space is your priority, you won't find anything more powerful at this size (277 x 254 x 190mm) and price.

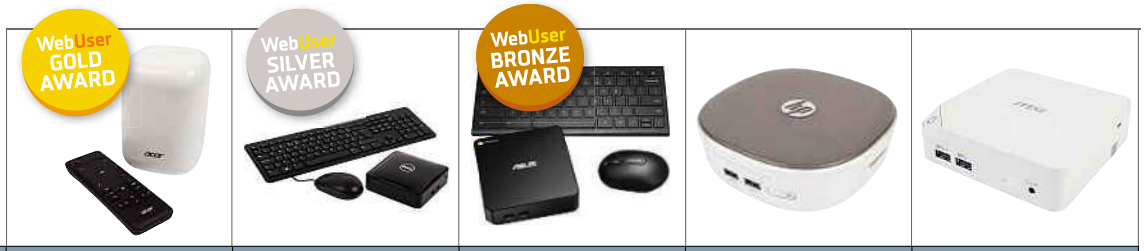
The **PC Specialist Elite S130 (£799, www.pcspecialist.co.uk | ★★★★☆)** is a good-value compact PC but we were a bit put off by its external appearance, which is an awkward size (399 x 240 x 207mm) and one of the biggest in this test. It has strong processor performance, plenty of storage and comes with a games controller, though, which is everything you'll need to get gaming for £800.

The **Scan 3XS ST15 (£849, www.scan.co.uk/3xs | ★★★★☆)** ignores Windows and instead comes with Steam OS installed. This gaming-specific operating system is still being tested but, if games are your priority, this powerhouse of a PC can deliver great performance. It also has the smallest case of this group (377 x 332 x 88mm).

We were impressed by the **Wired2Fire HaL Skylake (£973, www.wired2fire.co.uk | ★★★★☆)** but its processor and SSD aren't up to the standard of the Mesh Elite Voyager Mini CS, which is only marginally more expensive. It's also one of the biggest PCs here, at 380 x 250 x 213mm.

The **Yoyotech Warbird RS901 (£800, www.yoyotech.co.uk | ★★★☆☆)** comes in a stunning glass case (400 x 350 x 173mm), but we found it was overclocked too high and its performance degraded over time as the processor heated up.

Anyone looking for a PC that looks like a games console may take a fancy to the **Syber Steam Machine K (£999, www.cyberpowersystem.co.uk | ★★★☆☆)**. We felt it was too expensive, though, particularly as it only runs the Steam OS, so it can only be used for gaming. It measures 351 x 345 x 99mm.



	Acer Revo One RL85	Dell Inspiron 3050 Micro Desktop	Asus Chromebox	HP Pavilion Mini	MSI Cubi
WEBSITE	www.acer.com	www.dell.co.uk	www.asus.com	www.hp.com	uk.msi.com
PRICE	£269.99	£189	£185.99	£334.93	£221.66
BUY FROM	www.ebuyer.com	www.dell.co.uk	www.ebuyer.com	www.laptopsdirect.co.uk	www.lambda-tek.com
PROCESSOR	Dual-core 1.7GHz Intel Core i3-400SU	Dual-core 2.41GHz Intel Celeron J1800	Dual-core 1.4GHz Intel Celeron 2955U	Dual-core 1.9GHz Intel Core i3-4025U	Dual-core 2GHz Intel Core i3-5005U
MEMORY	4GB DDR3	2GB DDR3	2GB DDR3	4GB DDR3	Not supplied
STORAGE	500GB hard drive	32GB SSD	16GB SSD	1TB hard drive	Not supplied
MEMORY-CARD READER	SD	SD	SD	SDXC	✗
USB PORTS FRONT/BACK	None/2 x USB 2, 2 x USB 3	1 x USB 3, 1 x USB 2/2 x USB 2	2 x USB 3/2 x USB 3	2 x USB 3/2 x USB 3	2 x USB 3/2 x USB 3
NETWORKING	Gigabit Ethernet, dual-band 802.11n Wi-Fi	Gigabit Ethernet, 802.11ac Wi-Fi	Gigabit Ethernet, dual-band 802.11n Wi-Fi	Gigabit Ethernet, dual-band 802.11n Wi-Fi	Gigabit Ethernet, 802.11ac Wi-Fi
GRAPHICS	Intel HD Graphics 4000	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics 4400	Intel HD Graphics 4500
VIDEO OUT PORTS	HDMI, Mini DisplayPort	HDMI, DisplayPort	HDMI, DisplayPort	HDMI, DisplayPort	HDMI, Mini DisplayPort
SOUND OUTPUTS	3.5mm	3.5mm	3.5mm	3.5mm	3.5mm
KEYBOARD	Acer wireless keyboard	Dell KB213p	Asus Chromebox wireless keyboard	✗	✗
MOUSE	Acer wireless mouse	Dell MS111-L	Asus Chromebox wireless mouse	✗	✗
OPERATING SYSTEM	Windows 8.1	Windows 10	Chrome OS	Windows 8.1	✗
RESTORE OPTION	Restore partition	Windows 10 restore	Chrome OS power wash	HP restore partition	✗
DIMENSIONS	107 x 107 x 100mm	130 x 130 x 48mm	127 x 124 x 43mm	144 x 144 x 52mm	115 x 111 x 35mm
WARRANTY	One-year return-to-base	One-year return-to-base	One-year collect-and-return	One-year collect-and-return	One-year return-to-base

OUR VERDICT

The Acer Revo One RL85 wins our Gold Award because it offers the perfect balance between compact design and future expansion, particularly if you want a media PC for storing movies. Its case is bigger than the other mini PCs in this test, but it performs well and is capable of housing three hard drives.

We gave our Silver Award to the Dell Inspiron 3050 Micro Desktop. This comes in a smaller box that's great value for money, running Windows reasonably well for a very affordable price. Our only gripes are with its limited storage space and bundled bloatware.

The Bronze Award goes to the Asus Chromebox. If you can manage storing your files on the web rather than a built-in hard drive, a Chrome OS device is quick-booting, perfectly capable and great value for money. ■



Web User's Best Buys

Web User and its sister titles test over 2,500 products every year

HARDWARE

COMPACT PC



Acer Revo One RL85

£269.99 from www.ebuyer.com
Date tested: January 2016

The Acer Revo One RL85 has plenty of storage capacity and provides room for easy expansion at a later date. Performance is respectable and the compact PC's unorthodox design is attractive and clever.

KEY SPECS

Dual-core 1.7GHz Intel Core i3-400SU processor ■ 4GB of memory ■ 500GB hard drive ■ 2 x USB 2 ports, 2 x USB 3 ports ■ Gigabit Ethernet, dual-band 802.11n Wi-Fi ■ Windows 8.1 ■ One year return-to-base warranty

WIRELESS ROUTER



Netgear Nighthawk X4S

£259.99 from www.currys.co.uk
Date tested: December 2015

The Netgear Nighthawk X4S will boost your network, no matter what type of web connection you have. It's expensive, but built to last, and should make further upgrades unnecessary until the next 802.11 standards are launched.

KEY SPECS

Dual-band 2.4GHz, 5GHz ■ 802.11ac ■ 2.53Gbps theoretical max speed ■ ADSL2+ and VDSL ■ 5 x 10/100/1,000Mbps Gigabit Ethernet ports ■ Dual-core 1.4GHz processor ■ 285 x 185 x 50mm ■ One-year return-to-base warranty

BUDGET TABLET



Apple iPad Mini 2

£219 from www.apple.com/uk
Date tested: November 2015

The iPad Mini 2 has a superb, slim-but-solid design and a good-quality screen. Its performance keeps up with the latest tablets, and the battery life is also impressive.

KEY SPECS

7.9in screen ■ 2,048 x 1,536 pixels resolution ■ 1.3GHz Apple A7 processor ■ 16GB storage ■ 5-megapixel rear camera, 1.2-megapixel front camera ■ 802.11n dual-band Wi-Fi ■ iOS 9 ■ 200 x 135 x 7.5mm ■ 331g

WINDOWS 10 LAPTOP



Asus EeeBook X205TA

£201 from www.tesco.com
Date tested: October 2015

The Asus EeeBook X205TA is a netbook-style laptop with a great build quality and battery life. The price is terrific, too, but you might find it a bit small and cramped because it's been squeezed into such a tiny case.

KEY SPECS

Quad-core 1.33GHz Intel Atom Z3735F processor ■ 2GB of memory ■ 32GB eMMC storage ■ 11.6in non-touchscreen ■ 1,366 x 768 pixels resolution ■ 2 x USB 2 ports ■ 802.11n Wi-Fi ■ 286 x 193 x 18mm ■ 980g ■ One-year collect and return

WINDOWS 10 PC



Chillblast Fusion Centurion

£699 from www.chillblast.com
Date tested: September 2015

The Chillblast Fusion Centurion provides the latest, most powerful components for a reasonable price. It was the fastest PC we tested and can be easily upgraded.

KEY SPECS

Quad-core 3.5GHz i5-6600K processor ■ 8GB of memory ■ 1TB hard drive ■ 120GB SSD ■ 1 x USB 3.1, 1 x USB 3 Type-C, 3 x USB 4, 4 x USB 2 ■ Gigabit Ethernet ■ 465 x 430 x 192mm ■ Three-year collect-and-return warranty inc 2-years parts

SMARTWATCH



LG Watch Urbane

£224 from www.amazon.co.uk
Date tested: November 2015

The LG Watch Urbane looks good, is simple to operate and has a great screen (if you stay out of direct sunlight). It doesn't have the full range of fitness tools, but it's ideal as a smartphone companion. It won't pair with an iPhone, though.

KEY SPECS

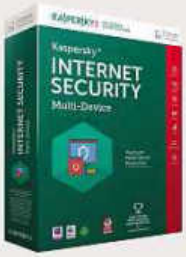
Android Wear 5.1 ■ Gorilla Glass 3 ■ 1.3in circular display ■ 320 x 320 pixels resolution ■ 512MB memory ■ 4GB storage ■ Bluetooth ■ 52 x 46 x 11mm ■ 67g ■ One-year return-to-base warranty

All prices correct at time of review

SOFTWARE & SERVICES

INTERNET SECURITY

Kaspersky Internet Security 2016



£19.99 from bit.ly/shop389
Date tested: January 2016

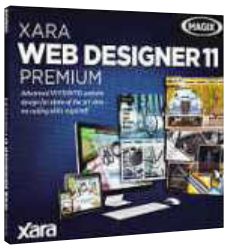
Kaspersky is rock solid at protecting your PC from the worst of the web, and performed brilliantly in our tests this year, blocking all viruses and malware with its robust defences. Click the link above to save £20 on the software (normal price £39.99).

KEY FEATURES

Anti-virus and firewall tools ■ Protects online shopping and banking ■ Identity and privacy tools ■ Dangerous-website alerts ■ Advanced parental control ■ Licences for one, three and five PCs; for one or two years, or pay monthly ■ Multi-Device version ■ Compatible with Windows 10

WEB DESIGN

Xara Web Designer 11 Premium



£69.99 from www.xara.com
Date tested: November 2015

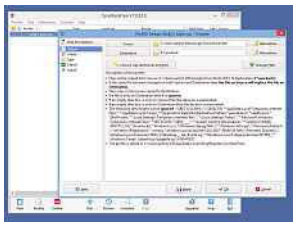
Xara Web Designer 11 is a great tool for anyone who wants a good-looking website without having to use HTML or CSS code. The interface is easy to use and the software includes all the tools you need to create flexible sites that change depending on the size of the screen.

KEY FEATURES

90+ templates ■ WYSIWYG design ■ Create responsive websites ■ Embed codes ■ Add HTML ■ Online editing ■ FTP uploader ■ Hosting (requires registration) ■ Browser preview (Chrome, Firefox, IE, Opera)

BACKUP AND SYNC

SyncBackFree



Free from bit.ly/syncback366
Date tested: March 2015

SyncBackFree is very capable software that gives you plenty of control over how it can be used. If you know what you need from your backups and you're prepared to spend some time configuring the options, SyncBackFree has everything you need.

KEY FEATURES

Synchronise: Copy files in both directions ■ Restore back-up files easily ■ Email logs ■ Schedule backups ■ Simple and Advanced mode ■ Runs on Windows 8, 7, Vista, and XP ■ Extensive Help documentation and support

PHOTO EDITING

Adobe Photoshop Elements 13



£81.08 from www.adobe.com/uk
Date tested: December 2014

With its tidy interface and pop-out trays, Adobe Photoshop Elements provides everything an amateur photographer needs and helps you quickly find the right editing tools.

KEY FEATURES

Compatible with Windows XP, Vista, 7, 8+ (32- and 64-bit) ■ Bundled photo organiser ■ Content-aware edits ■ Guided edits ■ People-beautifier tools ■ RAW support

VIDEO EDITING

Adobe Premiere Elements 13

£81.08 from www.adobe.com/uk
Date tested: December 2014



Premiere Elements 13's superb interface makes its many features neat but accessible. You won't find better video-editing software for the price.

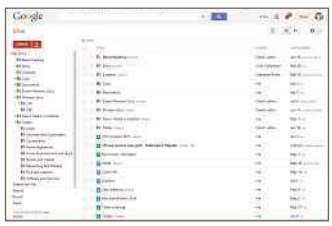
KEY FEATURES

Automatic editing ■ Export to multiple video formats ■ Burn to DVD and Blu-ray ■ Image stabiliser ■ Stop-motion capture ■ Motion tracking ■ Musical scores and sound effects ■ Upload to YouTube and Vimeo

ONLINE STORAGE

Google Drive

From free from drive.google.com
Date tested: August 2014



Google Drive is easy to use and has lots of free storage. The Windows software integrates with Explorer, so saving and syncing files is like keeping them in any other PC folder.

KEY FEATURES

15GB free storage ■ Web-based office software ■ Works with Windows XP, Vista, 7 and 8+ ■ Chrome browser add-on ■ Android and iOS apps ■ 100GB extra storage for £1.19 per month; 1TB for £5.97 per month; 10TB for £59.51 per month

Best Free Software

PASSWORD MANAGER

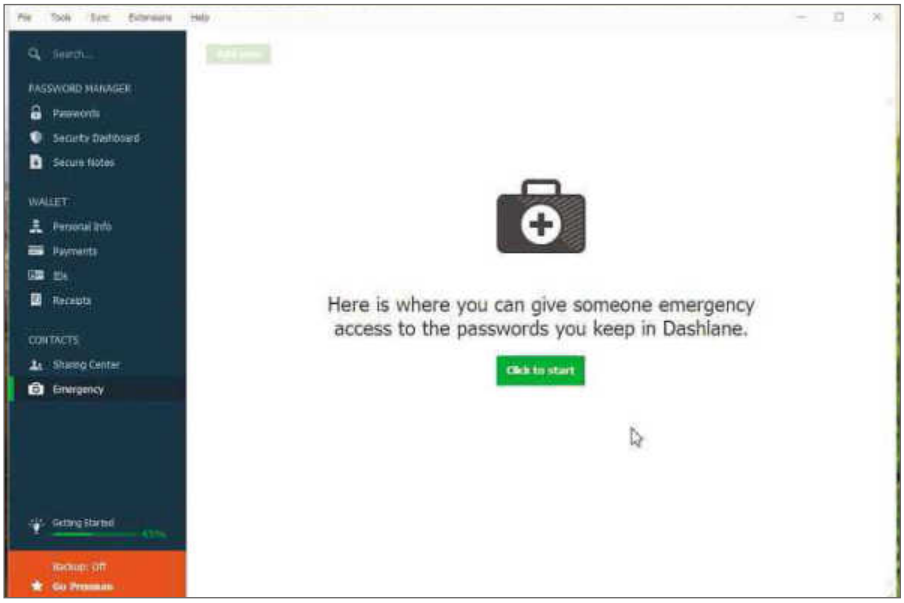
Dashlane 4

www.dashlane.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 524KB (installer)

If you take your security seriously – and you should – you'll use a different password to log into each of your online accounts. Using a password manager makes this much easier, because you won't have to remember them all or rely on your browser to do so, and they'll be kept safe.

Dashlane is one of the better password managers and this latest update introduces a new design which makes the program much easier to use. A sidebar provides quick and easy access to your stored passwords, security dashboard (which shows how safe your passwords are and offers tips to improve your security), secure notes, wallet and contacts.





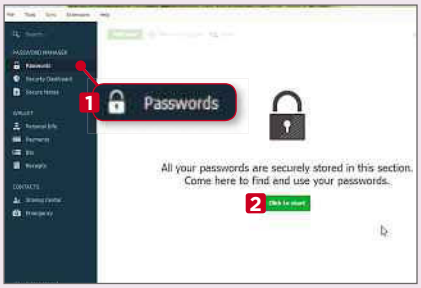
If you struggle to think up strong, unique passwords, Dashlane can generate and store these for you. There's a sharing centre to securely share passwords and notes with people you trust, and an emergency-contacts feature that allows loved ones to access your accounts in the event of something bad happening to you.

We particularly like Dashlane's security-breach alerts. If a site you use gets hacked, you'll immediately be alerted so you can change your password before hackers get a chance to log in with it.

The search function has been improved in the new version, as has the way in which you add and edit items. The Password Changer, which can automatically change any weak or compromised passwords on websites, has gained support for 300 new sites.

For an alternative password manager, check out our LastPass Workshop on page 52.

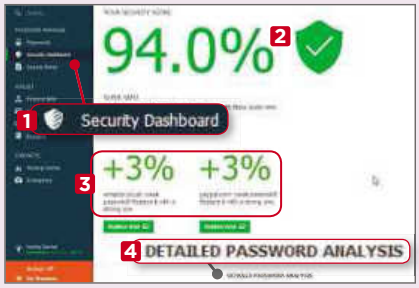
MINI WORKSHOP | Keep your passwords secure usung Dashlane



1 Create an account with Dashlane by entering your email address and a secure master password, then verify it with the code you receive via email. Install the Dashlane extension in your browser and you're ready to begin. Open the program and click Passwords, 1 then click the green 'Click to start' button. 2

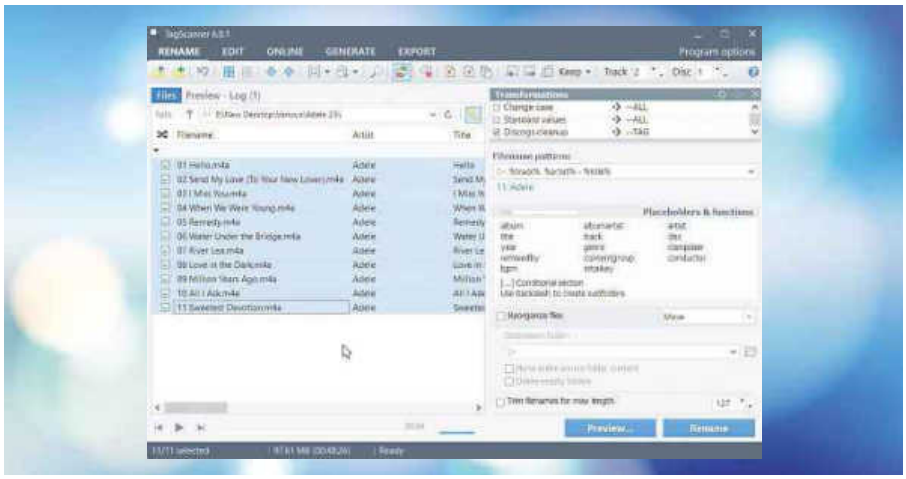


2 On the next screen, click the 'Add new' button 1 and enter a website URL (or select from a list of popular sites in the drop-down box), 2 along with your username and password. 3 You can add the website to a category 4 for easy management and organisation. Each time you log into a new website, Dashlane will offer to save the details for you.



3 Dashlane's Security Dashboard 1 analyses your passwords and presents you with an overall security score, 2 displaying any weak passwords you could improve. 3 Click Detailed Password Analysis 4 to see a colour-coded breakdown of all of your passwords. You can filter the list by All, Weak, Reused, Old or Compromised, and replace any that are problematic.

This fortnight's top new software downloads to help you make the most of your PC, and they're all FREE



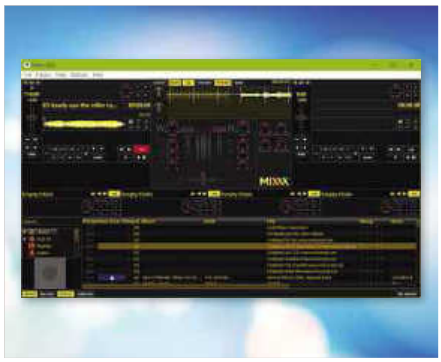
MUSIC MANAGER

TagScanner 6

bit.ly/tagscan390

Min requirements: Windows XP/Vista/7/8+/10 **File size:** 1.85MB

If your music collection is a bit of a mess, TagScanner can help you tidy things up. Add some songs and you'll be able to manually edit details such as the track number, name, artist and album. If that sounds like hard work, TagScanner can make the changes automatically by pulling information from online databases. It works with all the major audio formats and supports embedded lyrics and cover art. There's a new interface and a wealth of additional features in the new edition.



DJ SOFTWARE

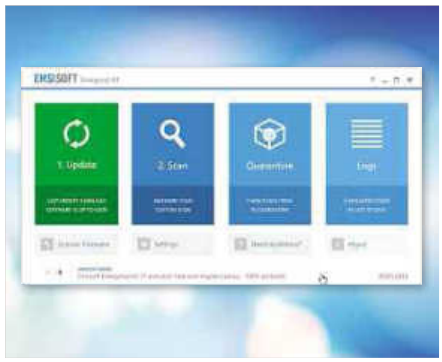
Mixxx 2

mixxx.org

Min requirements: Windows XP/Vista/7/8+/10, Mac OS X or Linux

File size: 23.9MB

This open-source DJ software offers all the tools you need to mix music live. It supports up to four decks playing simultaneously, and offers a wealth of effects. The latest version has been completely rewritten and makes improvements to the mixing engine, with an upgraded music library and expanded support for DJ controllers. It looks confusing but it's quick to master.



ANTI-MALWARE TOOL

Emsisoft Emergency Kit 11

bit.ly/emsi390

Min requirements: Windows 7/8+/10

File size: 203MB

If your PC gets infected with malware, you can use this kit to clean it up. It has a dual-engine scanner (Emsisoft and Bitdefender) and offers a choice of scans – Quick, Malware, and Custom. It can also detect Potentially Unwanted Programs (PUPs). It doesn't need to be online to work, and is fully portable. The new version offers both 32- and 64-bit editions, and has a redesigned and more intuitive interface.

New Windows Apps

LaunchPal

bit.ly/launchpal390

Min requirements: Windows 8+/10

File size: 6.1MB

LaunchPal keeps you abreast of all up-and-coming space launches and events. It tells you the purpose of the launch and provides a countdown, and may also point you in the direction of live video.



SpotBright

bit.ly/spotbright390

Min requirements: Windows 10

File size: 2.8MB

Windows 10 has a lockscreen feature called Spotlight that displays attractive, regularly updated images from the web. SpotBright makes it easy to download these photos so you can use them on your Desktop.



Football Hub

bit.ly/footballhub390

Min requirements: Windows 10

File size: 75.48MB

This app displays the latest football news, results and information for teams in the top English and Scottish leagues. There are plans to add more leagues in the future.

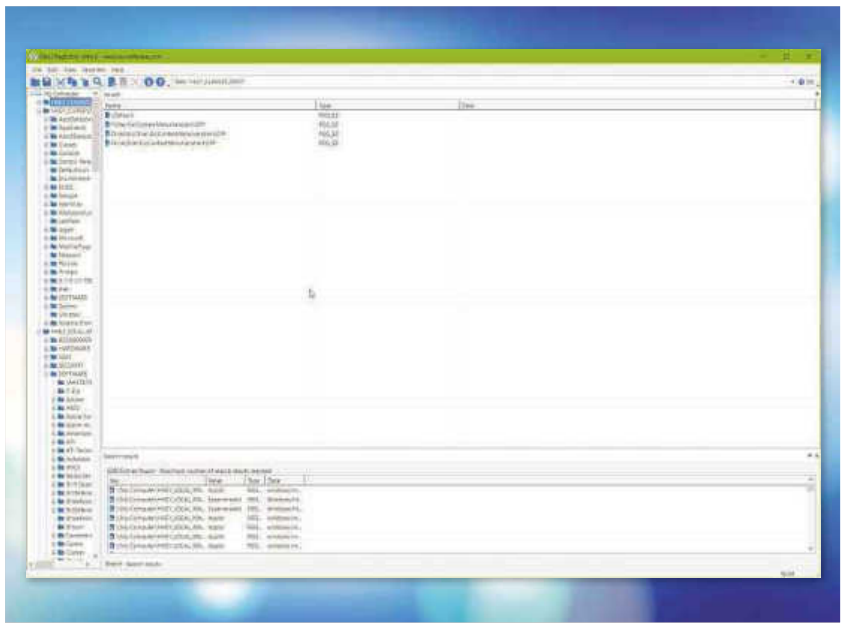


REGISTRY EDITOR

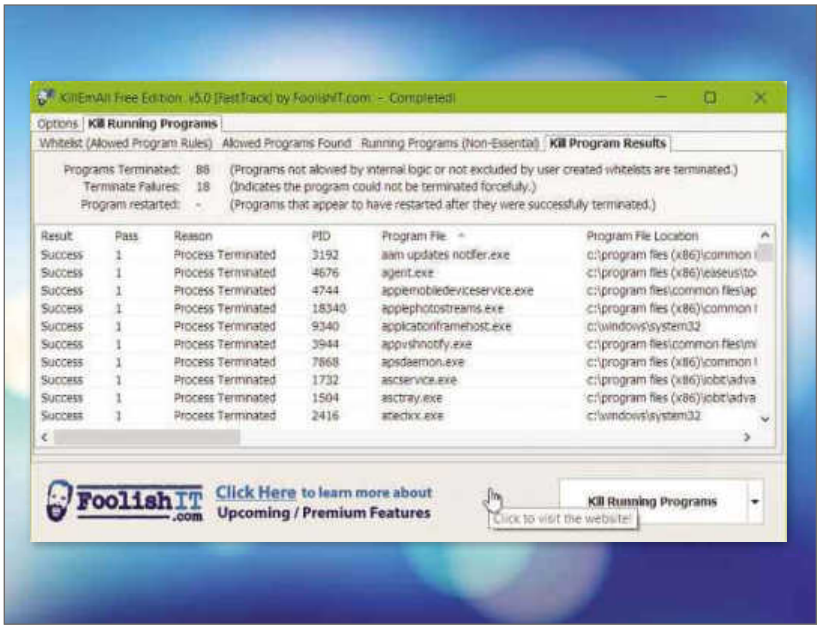
O&O RegEditor

www.oo-software.com

Min requirements: Windows XP/Vista/7/8+/10 **File size:** 4.2MB



Windows comes with its own built-in Registry editor (Regedit) for making changes to the Windows Registry, but it has a rather basic interface and doesn't offer many features. O&O RegEditor is a more advanced tool for the job, and provides a number of handy features including enhanced search options, full copy-and-paste support, advanced editing, Registry export and more. The program doesn't even require installation. Just open the Zip file and choose which version you require – either 32- or 64-bit – to start using the program. If you prefer O&O to Regedit, there's an option to set it as your default Registry tool.



SYSTEM TOOL

KillEmAll 5

bit.ly/killemall390

Min requirements: Windows XP/Vista/7/8+/10

File size: 4.4MB

Currently available as a free beta, the portable tool KillEmAll instantly terminates all running programs on your computer, with the exception of important Windows processes. This can be useful if you're in a hurry and want to close multiple applications quickly (make sure you save your work first), or you suspect your computer has just been infected by malware. All you have to do is click the button, confirm the action, and everything will close.

The updated version of the software provides information about running programs and lets you choose what to terminate. You can also create your own whitelist of software that the program should never close.

SYSTEM TOOL

Missed Features Installer for Windows 10

mfi-project.weebly.com

Min requirements: Windows 10 **File size:** 1.3GB

Microsoft removed a lot of features from Windows 10, to the annoyance of many users, and this program helps you get them back. It's a sizable 1.3GB ISO file, and contains various third-party tools including Classic Shell, Gadgets 2.0 and the Windows Experience Index Tool. It also offers software pulled from past versions of Windows, such as Windows Media Center and Movie Maker. You'll need to mount, burn or open the ISO file, and launch the application on a PC running Windows 10. Just browse the selection, then run the installer for the software you want.

You should back up your PC before using the software to make wholesale changes, in case anything goes wrong.





GAME

Computer, Open That Door!

bit.ly/opendoor390

Min requirements: Windows XP/Vista/7/8+/10, Mac OS X or Linux
File size: 12.1MB

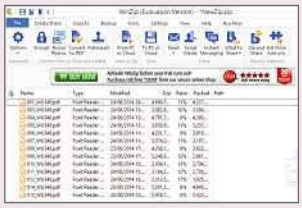
It's never good news for humans when spaceship computers become sentient. As the newly awakened AI in this strategy game, your aim is to kill all the crew before they notice and reset you. Killing crew members is done by locking or unlocking the ship's doors at the right time. See our FAQ on page 36 for more about sentient machines.

✗ Don't install...

WinZip

www.winzip.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 689KB (installer)

The well-known compression tool WinZip is now in its 20th version and we like that it offers a before-and-after comparison of your files when you zip them, to demonstrate how much smaller they've become. However, that's not enough to justify its £25.95 price tag, especially when there are free alternatives available that are equally good.



...Install this instead ✓

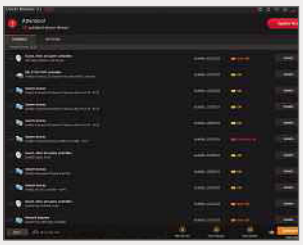
Hamster Free Zip Archiver

www.hamstersoft.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 9.6MB

Hamster Free Zip Archiver's attractive interface makes shrinking files and folders a doddle. You can choose from two types of compression: standard Zip files, which can be opened on any Windows PC; and the 7z format, which creates smaller files but requires compatible software to decompress them. The software offers three levels of compression, depending on whether you want to prioritise size, speed or a combination of the two. You can also encrypt your archives and protect them with a password.



UPDATED | New tweaks and fixes for your favourite free programs

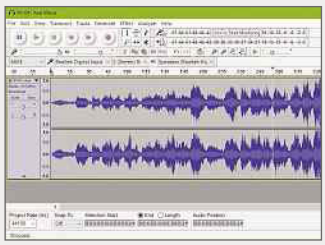


DRIVER MANAGER

Driver Booster 3.2

www.iobit.com
Min requirements: Windows XP/Vista/7/8+
File size: 13.8MB

Driver Booster automatically finds and updates outdated, incorrect or faulty hardware drivers installed on your PC. The latest version introduces a new fix-it tool for drivers, and makes improvements to the software's performance and stability.



AUDIO TOOL

Audacity 2.1.2

audacityteam.org
Min requirements: Windows XP/Vista/7/8+/10
File size: 25.3MB

Changes in the latest version of this popular audio editor include the addition of a new 'Spectral Reassignment' algorithm for vocal work, and improvements to the Pitch tool. Spectrogram Settings are now available for separate tracks and there have been a number of bug fixes.



PDF TOOL

Foxit Reader 7.3

www.foxitsoftware.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 41.05MB

Foxit Reader is much more than a simple PDF viewer – you can also use it to edit and create PDF files in various ways. This update to the software introduces OneDrive and Google Drive integration, word count, time stamps, PDF sign improvements, Office 2016 support and more.



PRIVACY TOOL

PrivaZer 2.44

privazer.com
Min requirements: Windows XP/Vista/7/8+/10
File size: 7.3MB

PrivaZer is a PC and privacy cleaner designed to remove all references to everything you've ever opened, watched, downloaded, deleted or said on your computer. This release improves cleanup of the Windows recycle bin, and fixes an invalid signature problem. ■

GET FREE SOFTWARE FIRST subscribe to Web User at subscribe.webuser.co.uk

Best New Browser Tools

CHROME

Browse all hidden subcategories on Netflix

In last issue's What's New Online, we wrote about the secret codes that let you jump straight to specific subcategories in the browser-based version of Netflix, including 'Movies based on children's books', 'Camp films' 'Deep sea horror movies', 'Science & nature documentaries' and 'Steamy thrillers'. Now some clever clogs has created a Chrome (and Firefox) extension that makes it even easier to find specific genres of films and TV shows. Just install Netflix Super Browse (bit.ly/netflix390) to add a new Super Browse option to the Netflix navigation bar. Click this to browse an alphabetical list of all available subcategories, or to search their titles for a specific term. It's a splendid idea that saves you endlessly scrolling through movies and series that you have no interest in watching, and lets you quickly find something that suits your tastes and current mood or company.

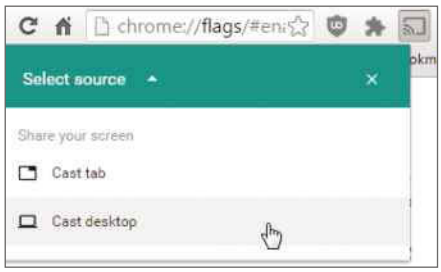


Stream content from Chrome without an add-on

We've long been fans of Google's brilliant Chromecast dongle, especially its ability to 'cast' the contents of your browser or Desktop to your TV screen via the Google Cast extension for Chrome (bit.ly/googlecast353). So we're delighted to report that Chrome now offers built-in support for this feature, and you no longer need the add-on.

To activate it, type `chrome://flags` into your address bar, press Enter and find the entry Enable Media Router (use the Ctrl+F function to save time). Select Enabled from the drop-down menu, relaunch Chrome and you'll notice that the Chromecast icon now appears on your toolbar. Click this to connect to the streaming device over your wireless network, then choose whether to cast the current browser tab to your telly or your whole screen.

It's a great way to enjoy web content, including videos, from the comfort of your sofa.



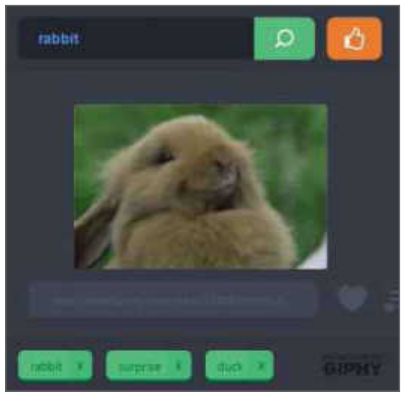
Explore the world from your New Tab page

If the cold, gloomy weather is getting you down and you can't afford a holiday, why not visit some warmer countries in your browser via a lovely new extension called Dream Afar New Tab (bit.ly/dream390)? This lets you take a virtual trip around the world by displaying random photos of stunning locations on your New Tab page, from sites including Flickr, Bing, 500px, Google Earth and Dream Afar's own archive. You can set the background image to refresh every minute, hour or day; and show or hide the time, weather and temperature for your current location. You can also display a Google search box and links to your Bookmarks, History and most-visited sites. The scene pictured above, from Tuscany in Italy, certainly looks more appealing than Central London on a grey January morning!



Cheer yourself up with random GIFs

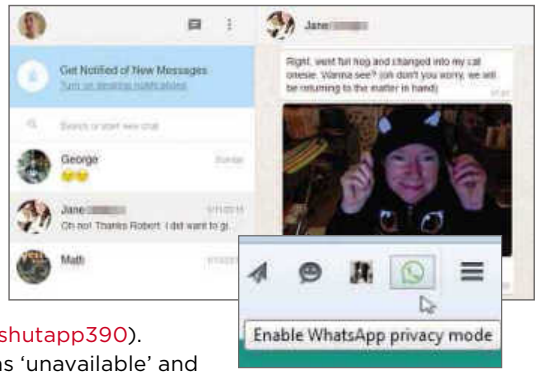
When you're feeling down, a quick GIF of a cute animal, a funny moment from a film or a clip of someone's hair catching fire can prove just the tonic, which is why Rando.me a GIF (bit.ly/gif390) is such a good idea. Click its toolbar button to view a random GIF from the popular GIF resource Giphy (giphy.com) or to enter a keyword to find one with a specific subject. The add-on usefully stores your last three searches, and lets you save your favourite GIFs and share them with friends.



This fortnight's most useful tips and add-ons to help you get the most from Chrome, Firefox, Opera and more

FIREFOX

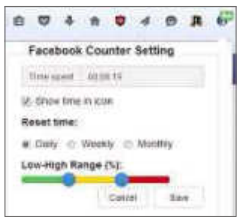
Make yourself invisible on WhatsApp Web



One of the downsides to messaging apps such as WhatsApp and Facebook Messenger is that people can see when you're online, so they expect an immediate response when they contact you. To hide yourself when you're using the web-based version of WhatsApp (web.whatsapp.com), install the smartly named ShutApp (bit.ly/shutapp390). This add-on shows your status as 'unavailable' and doesn't mark messages you open as 'read', effectively making you invisible to other WhatsApp users. The advantage of this 'private mode' is that you can choose who you chat to and don't feel obliged to reply to needy demands. Messages will also show as unread on your synced mobile device.

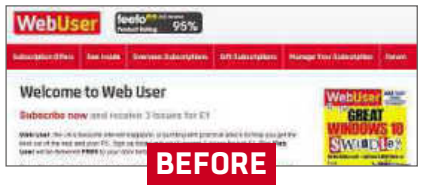
Monitor how long you spend on Facebook

If you're worried that you're wasting too much time browsing funny videos, spoof news stories and drunken meltdowns on Facebook, there's a new add-on that tells you exactly how long you spend on the site. Facebook Counter (bit.ly/facebook390) starts ticking away the seconds as soon as you visit the social network, then pauses again when you leave. You can monitor the total time you've been on Facebook in a day, week or month, and see if it rates as low, medium or high. The approximate number of minutes is shown on your toolbar – click the clock for further info.



Reduce the brightness of websites at night

Browsing the web at night can play havoc with your vision, because the glare from the screen puts a strain on your tired eyes – especially on sites with a white background. A new Firefox add-on called Simple Night Mode (bit.ly/night390) protects your eyesight after dark by inverting the colours of web pages to reduce the strain on your peepers and make content easier to read. To toggle the feature on or off, right-click the page and choose Night Mode On or Off to apply the changes.





Turn online photos into border collies

If you like border collies, then you'll love Supercollies (bit.ly/collies390), which changes every image on a web page into photos of the black-and-white pooch. If you're not a dog lover, or you prefer another breed, then sadly there's nothing here for you. Sorry, it's been a slow fortnight for Firefox add-ons!



OTHER BROWSERS

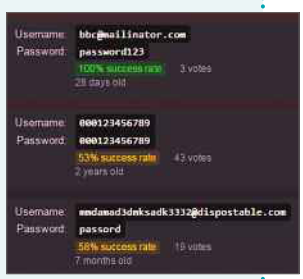
Block all pop-up ads and alerts

Opera is generally very good at preventing pop-up adverts from disturbing your browsing but, occasionally, the odd one slips through its defences. To stop this happening, install VSecure (bit.ly/vsecure390), which not only blocks pop-up ads but also blitzes pop-unders and – optionally – the annoying alert messages displayed by some websites that obstruct your view. It automatically updates to deal with evolving pop-up scripts, including JavaScript, and can be easily disabled when you need to see a particular pop-up or alert.



Generate usernames and passwords

Coming up with a username and password to register with a site you may never use again is a waste of time and effort, which is why you need the brilliant BugMeNot 2 (bit.ly/bugmenot390). This updated tool generates random logins, which not only makes life easier but more secure, because you don't need to hand over your real email address or risk entering a password you already use on another site. Just click the add-on's toolbar button for a choice of options, complete with 'success rate' scores left by other users.



Best Free Apps

App of the Fortnight

PRESENTATION

UPDATED

Adobe Voice

bit.ly/voice390

Min requirements: iOS 8

Size: 148MB



New to iPhone (it's been available on iPad for a while), Adobe Voice is a powerful tool that's designed to help you create short animated videos without professional equipment or training. Indeed, the app lets you tell a story using nothing more than your voice and its impressive catalogue of free icons and images.

Before you can use Voice, you need to sign up via Facebook or your email address (you can also sign in with an Adobe account, if you have one). On the homepage, you're then presented with a short video explaining how the app works, which is incredibly straightforward: each video is made up of a series of pages and each of these pages consists of a voice clip and an image (or text).



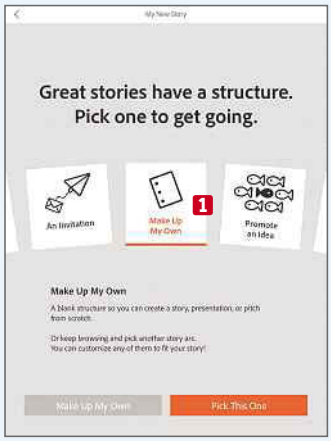
Aside from the audio narrative, creating a video with Voice feels much like creating slides in PowerPoint. However, your project ends up feeling much more dynamic than a bog-standard slideshow, thanks to the addition of cinematic transitions and a soundtrack. To help illustrate your story, the app provides a searchable catalogue of more than 100,000 Creative Commons images and 20,000 Adobe icons. You can use your own photos, too, which makes Voice perfect for everything from creating a narrated slideshow of your holiday snaps to giving a formal business pitch.

Our rating ★★★★★

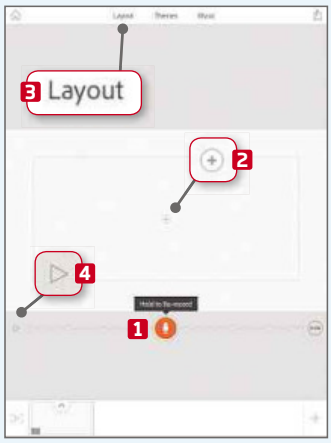
MINI WORKSHOP

Create an animated video using Adobe Voice

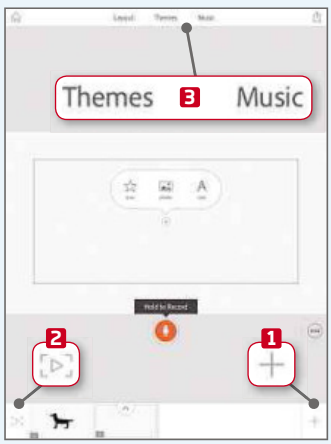
1 Select 'Create a New Story' from the homepage when the 'What's Your Story About?' page loads, and enter a title for your video. Tap Next and select one of the story templates or pick Make Up Your Own **1** to start with a blank canvas.



2 When prompted, select 'Skip the Tutorial'. Press and hold the microphone button **1** to record a voice clip for your first page. Next, tap the middle '+' icon **2** and use the appropriate buttons to add an icon, photo or text. Use the Layout **3** button to change the page's design or press the Play button **4** to preview it.



3 Press the '+' icon to add a new page **1** and repeat the instructions as described in step 2 to add audio and images. You can preview the whole video using the lower Play button **2** or use the Themes and Music **3** buttons to alter its appearance or soundtrack. Once you're happy, there's the Share button to share your video via a multitude of channels.



This fortnight's top free and paid-for apps for Android, iOS and Windows phones and tablets, and smart TVs

PHOTOS

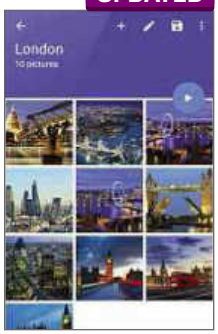
UPDATED

Stop Swipin

bit.ly/swipin390

Min requirements: Android 5.0

Size: 2.1MB



Stop Swipin offers a way of showing your friends and family photos without any risk of them swiping too far through your gallery and seeing something private or embarrassing. By choosing the photos you want to add and then tapping play, the selection is pinned so that users can only exit the slideshow by pressing Back and Overview simultaneously. It's a neat idea, but the free version imposes a few restrictions (for example, you can only display 10 images) and a message tells users how to unpin the application whenever a button is pressed, making it little more than a small hurdle for determined snoopers!

Our rating ★★★☆☆

CODING

NEW

Learn Python Programming

bit.ly/python390

Min requirements: Android 4.0

Size: 8.5MB



Python is a powerful programming language that's used by millions of developers, and this app aims to help you master it by offering more than 100 free tutorials. Its main course is divided into bite-size video modules, and to progress you must correctly answer a series of questions about what you've just learned. There's also a wealth of written information in the form of example programs and interview questions answered by programming experts, all of which are rated according to difficulty. Once you're confident in your knowledge, you can challenge other users in a head-to-head quiz.

Our rating ★★★★☆

ALARM

NEW

Mimicker Alarm

bit.ly/mimicker390

Min requirements: Android 4.1

Size: 21MB



Developed by Microsoft Garage, Mimicker is an alarm app that asks you to complete one of several fun games to stop its tone from sounding. At first, it appears much like any other alarm app, letting you create a new custom alarm, then choose its ringtone and the days on which it'll repeat. However, to ensure there's no risk of you going straight back to sleep, Mimicker also asks you to choose which 'Mimics' you're happy to perform from a list that includes repeating a tongue twister, pulling a facial expression and even capturing a colour with your smartphone's camera.

Our rating ★★★★☆

MUSIC

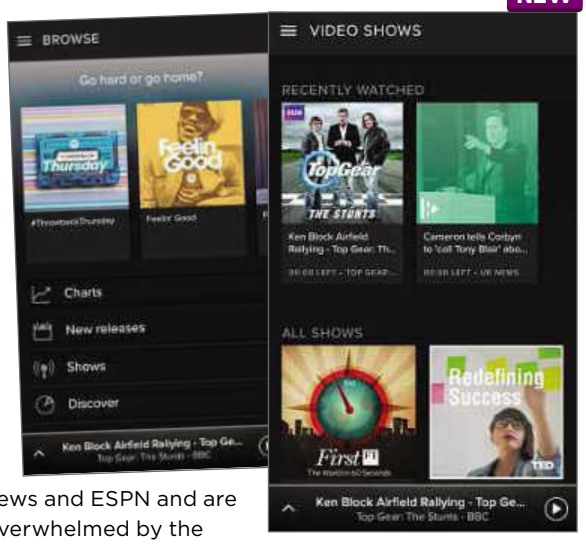
NEW

Spotify Music

bit.ly/spotify390

Min requirements: Android (varies with device), iOS 7, Windows Phone

Size: Varies with device



In the most recent updates to its apps for iOS and Android, Spotify introduced video content to the streaming service for the first time. The clips, which are mostly short in length, come from a range of media companies including the BBC, Comedy Central, Vice News and ESPN and are free to all users. We weren't overwhelmed by the content on offer – although we did enjoy watching some clips from *Top Gear: The Stunts* – but it's still early days and we expect it to improve. What's more, the new feature is fairly well tucked away at the moment (you can find it by selecting Browse and then Shows), so it shouldn't interfere too much with early adopters who only want to stream music and will add value for prospective users who are deciding which music-streaming service to sign up to.

Our rating ★★★☆☆

GET THE DEFINITIVE GUIDE TO ANDROID

Our new updated Android MagBook is packed with 148 pages of apps, workshops and advice to unlock the full potential of your tablet and phone.



Discover how to:

- Master new tools in Lollipop and Marshmallow
- Stop apps leaking your personal data
- Record anything on your phone and tablet
- Prevent updates from wrecking your device
- Remove hidden junk so it never comes back
- Switch from iOS without losing data

Order it now from Amazon at bit.ly/defguidetoandroid

FOOD & DRINK

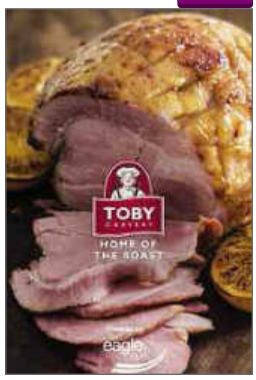
NEW

Toby Carvery

bit.ly/toby390

Min requirements: Android 4.0.3, iOS 8

Size: 17MB (Android) 37MB (iOS)



If you fancy dining out on a roast dinner, Toby Carvery's tasty new app will have you stuffing yourself with meat, veg and gravy in no time – any day of the week! You can find your nearest restaurant on a map of the UK, browse the food and drinks menus and book your table through the app. The Toby Treats option gives you instant access to the latest discounts (some of which are exclusive to the app) and you can also collect reward stamps to trade in for free grub. For a limited time, anyone who installs and registers the app can claim a free pudding!

Our rating ★★★★☆

DRINK & FOOD

UPDATED

Starbucks

bit.ly/starbucks390

Min requirements: Android 4.1, iOS 8

Size: 79MB (Android), 90MB (iOS)



Last year, Starbucks delighted caffeine-loving iPhone users by adding a feature to its iOS app that lets you order and pay for your coffee before you reach the counter or even enter the store. Now the Mobile Order & Pay option is available on the Android app, allowing you to skip the queue, save time and avoid speaking to the barista altogether. Simply top up the app with money, find your nearest Starbucks and order your coffee, muffin and whatever else, earning stars for your reward card as you do so. Mobile payment works at 700 Starbuck stores around the UK.

Our rating ★★★★☆

5 NEW APPS WORTH PAYING FOR

HEALTH

Caffeine

bit.ly/caffeine390

Min requirements: iOS 9

Size: 4.4MB **Price:** 79p



A perfect companion to the Starbucks app (see above), this app tracks your caffeine intake and stores results in your iPhone's Heath app. It covers beverages including coffee, cola and energy drinks.

PHOTO

SKRWT

bit.ly/skrwt390

Min requirements: Android 4.0, iOS 8

Size: 5.2MB (Android), 9.9MB (iOS)

Price: 67p (Android), £1.49 (iOS)



New to Android, SKRWT fixes common problems with the photos you take using your phone's camera. These include distortion, crooked lines and odd angles, plus lots of other useful editing features.

GAMES

Countdown

bit.ly/countdown390

Min requirements: Android 2.3.3

Size: 83MB **Price:** £1.49



The official Android app for Channel 4's longest-running game show has been updated with more than 500 new conundrums, more natural gameplay against your virtual opponent and a mix of letters that more closely matches the TV version.

GAMES

Football Agent

bit.ly/football390

Min requirements: Android 4.1

Size: 7.9MB **Price:** 72p



Most football games involve tactics and skill but in this one, "you only care about money and your clients' happiness". Negotiate transfer deals, build relationships with clubs and get rich as quickly as possible – just like a real agent!

HEALTH

Music for Moods

www.musicformoods.com

Min requirements: Android 4.2, iOS 8

Size: 54MB (Android) 91MB (iOS)

Price: £2.38



This app helps you achieve the optimum heart rate by providing breathing instructions and purpose-written music. Cleverly, it measures your pulse using your phone's camera and charts the results onscreen.

Caffeine

SKRWT

Countdown

Football Agent

Music for Moods

Best New TV Apps

TV

Sky Go for Android

bit.ly/skygo390

Min requirements: Android 4.0
Size: 14MB

Sky has made welcome improvements to the Android version of its mobile video service, which lets you watch TV shows, films and sport live and on-demand. The attractive new homepage streamlines the layout and increases the size of thumbnail images, which makes it easier to browse and select content. There's a new, full-screen landscape mode for viewing programmes and films on tablets, although it's a shame there's still no support for streaming to Chromecast. Sky has also fixed stability problems that often caused the app to crash. The changes should be coming to the iOS version of the app sometime this month. See page 15 for our review of the relaunched Sky Go website.



TV

BBC iPlayer

bit.ly/iplayerandroid386
bit.ly/iplayerios386

Min requirements: Android (varies with device), iOS 7
Size: Varies with device



Another month, another update to the iPlayer app (unless you've got a Windows Phone, on which it's sadly neglected). Additions include the option to watch old shows you've purchased from the BBC Store offline, which is useful when you're travelling and lose your web connection. Equally useful is the ability to tune into live regional news wherever you are in the country via options that have been added to the TV Guide and Channels pages. So if you want to find out if the area you're heading to has been flooded, you can now do so in advance. The Beeb has also "been working hard making the app look more snazzy on the iPad Pro".

TV

ITV Hub for Android

www.itv.com/mobile

Min requirements: Android 4.1
Size: 29MB

Last time we looked at the Android version of the ITV Hub app, we included some scathing reviews from Google Play. This was lazy journalism on our part, but it was also quite amusing so let's see what people are saying now ITV has "squashed some bugs to help make your viewing experience even better". On the negative side, one viewer grumbles that there are "still no subtitles, still no Chromecast [support], still no Favourites button", while another is more frank: "What a crock of crap". On the plus side, ITV is responding to users and asking them to report problems, and suggests that upgrading to Android 4.3 might solve performance issues.



✗ Don't install...

Twisty Launcher

bit.ly/twisty390

Here's a great idea: an app that launches your favourite mobile tools without you needing to tap anything. For example, you can activate your camera by chopping the air with your phone, or launch the app of your choice by twisting your device twice. Sadly, in practice, it doesn't work very well – either taking too long to respond or not responding at all. So you're likely to end up with nothing more than a very sore wrist!



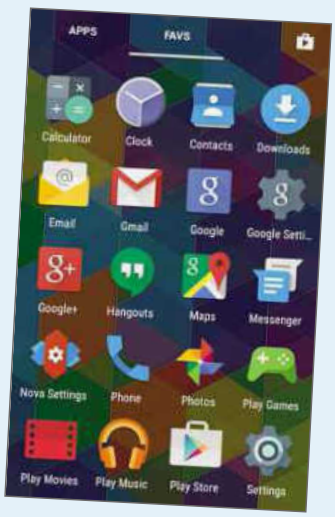
...Install this instead ✓

Nova Launcher

bit.ly/nova390

Min requirements: Varies with device
Size: Varies with device

If you like Android but wish it offered more scope to customise the look and content of your home screen, then Nova Launcher is the perfect app for you. It displays the familiar grid of Android apps, but lets you change everything from the number of icons on each screen to their position, appearance and labels, with thousands of themes to install. Other useful features include infinite, looped scrolling through your home screens, rather than swiping back and forth; and the option to back up your screen so you can restore your apps exactly as they were when you buy a new device.

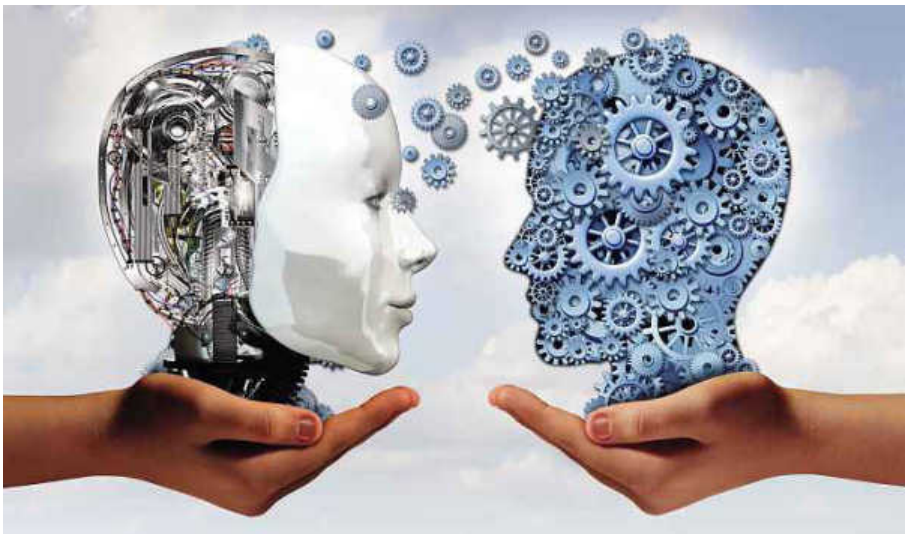


FAQ

Everything you need to know about the most interesting new technology trends and events

Machine learning

Who needs human beings anyway? Computers are now thinking for themselves and have programmed their underling **David Crookes** to explain how and why



What is machine learning?

When we're born, our minds are effectively a blank slate that's ready to absorb all sorts of data from the world around us. As we look, hear, touch and make our way around our environment, we attempt to make sense of it all, working out how to get better at the tasks we're faced with and learning from experience. Machine learning is a subfield of artificial intelligence that seeks to mimic this process with computers. Instead of coding machines to perform exactly as the programmer wants, which can result in human error, computers are being taught how to think and acquire new knowledge by themselves.

How does it work?

The idea is that humans don't have to guide computers through every step of a task and come up with different rules covering every eventuality. Instead, programmers can present machines with lots of data describing a certain problem and allow the computers to build their own models. To get the ball rolling, a coder writes a machine-learning algorithm – that is, a sequence of instructions – but, from that point on, the computers train themselves to learn what works and what doesn't. The more knowledge they acquire, the more they adapt their output.

What benefit does this have?

Machine learning enables computers to solve problems much more quickly than us mere mortals could, especially in situations involving data that would overwhelm the average person. Every time a computer is exposed to new data, it can test the incoming information against its model and look for emerging patterns. Should anything appear unreliable or out of the ordinary, the computer can quickly and independently adapt to the new set of data using complex mathematical calculations. It means that hard-and-fast rules can be dispensed with, which is particularly useful in situations that require more flexibility.



Google's self-driving cars are among the most notable examples of machine learning

Is it something new?

Not at all. In fact, the concept dates back to 1949 when Arthur Lee Samuel began researching machine learning, eventually coming up with the Samuel Checkers-playing Program, which went on to win a game against the number-four ranked player in America in 1962. The whole field of artificial intelligence was advanced by computer scientist Alan Turing, but it has taken great strides in recent times.

How is it being used?

Every time you use the web, you're engaging with machine learning. Google's search engine, for instance, not only remembers your previous searches but incorporates every new item you click to refine the results it displays in the future. Machine learning works within email, too, using your actions to refine what it classifies as spam so you're not bombarded with unwanted junk. It's also used for dating websites, online language translation and to navigate self-driving cars. Shopping sites such as Amazon and eBay make recommendations based on past perusals and purchases, encouraging you to spend more money.

So it's a lucrative business, then?

It would seem that way. Machine-learning startup Maluuba (www.maluuba.com), which focuses on "natural language understanding to give machines human-like intelligence", has raised $6m in funding and its "intelligent personal assistant" has drawn comparisons to Apple's Siri. There's talk of it revolutionising the SEO (search-engine



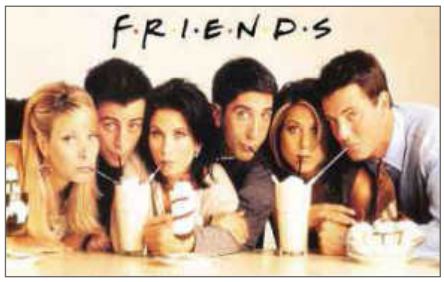
Maluuba aims to give machines human-like intelligence



TensorFlow is the machine-learning library behind many popular Google tools



DeepMind is a huge, ever-growing, brain that rules from the centre of the Ultraworld



Could machine learning be *any worse at writing new scripts for* Friends?

optimisation) industry. Facebook also uses machine code to individualise your timeline and, every time you interact with the site, you're teaching it more about your habits. However, it's not all good news. The World Economic Forum has debated the effects of what it calls a Fourth Industrial Revolution, the "fusion of technologies that is blurring the lines between the physical, digital and biological spheres", which includes AI and machine learning. They say millions of jobs could be lost globally by 2020.

How advanced is machine learning, though?

From a consumer perspective, things are moving pretty quickly. In November, Google's Inbox app for Android and iOS announced a new feature that scans your emails and works out whether or not they need a reply. If they do, you're presented with three natural-language responses with content determined by an ongoing learning process. The technology behind it – TensorFlow (www.tensorflow.org) – also powers several other Google products including Photos, search and speech recognition. Google made it open-source at the end of last year.

So Google's at the forefront?

To a degree. It's certainly interested in machine learning, which is why it acquired the UK artificial-intelligence company DeepMind Technologies in 2014. Now called Google DeepMind (deepmind.com) and dubbed the firm's "super-brain", it combines a deep neural network with a reinforcement-learning algorithm. It learned to play 49 classic Atari games by itself last year, which DeepMind co-founder Demis Hassabis said was "the first significant rung on the ladder to proving general learning systems can work". You can watch a YouTube video of it playing Breakout at bit.ly/deepmind390.

Ah, but can machine learning master chess?

Actually, it can. A deep learning machine called Giraffe created by Mathew Lai at Imperial College London taught itself to play chess using a neural network that mimics the human brain. It has shown itself able to spot patterns in chess using data from real games. Lai says it can quickly evaluate tricky positions and understand positional concepts which come naturally to humans. Uniquely, the machine can play at International Master Level – something no computer has achieved before.

Isn't this all a bit Terminator-ish?

Comparisons have been made between machine learning and Skynet's synthetic intelligent-machine network but we're still far away from any rise of the machines. Even so, strides are being made to make robots and machines not only see but understand their environment. Fei-Fei Li, director of the computer vision lab at Stanford University, has been training computers to make sense of their environment by presenting them with millions of random images, each tagged by a vast crowd-sourced army of volunteers. The error rate was found to be just 5%.

Can't we become friends with our computers?

That's pushing things a bit far, although computers may already be better at working out our personality traits than humans, even the friends and family who know us well. Machine learning has been used at Cambridge University to monitor Facebook Likes and learn the various psychological traits associated with certain patterns, as judged from the presented dataset.

On a more literal level, programmer and cartoonist Andy Herd fed 10 seasons of scripts from the US comedy *Friends* into a database and used a form of machine learning called a "recurrent neural" to produce new scripts. "It's barely English," concedes Herd, but who knows: if a universe of monkeys given an infinite amount of time could theoretically produce the collected works of Shakespeare, perhaps one day all comedies will be written by artificially intelligent machines.

HOW MACHINE LEARNING IS BEING USED



Fighting fraud

IBM says it is creating virtual data detectives by using machine learning to analyse historical transaction data to detect fraudulent patterns. By analysing and scoring real-world, real-time financial transactions, it can learn new patterns in fraudulent behaviour and help to accurately pinpoint any wrongdoing.



Predicting employee access

IT departments grant access privileges to employees depending on their role, which sometimes means that a person is barred from an area that would be useful for their productivity. Amazon has sought to create a fluid system that draws on historic data and can change employee attributes over time.



Making medical advances

Biological science has found that machine learning is able to learn gene-expression patterns, which show up when bacterium is exposed to certain conditions, and extract principles of bacterial genomics. And lots of companies are also looking to use machine learning for medical diagnostics.

Want to Beat web censorship? Hate it that the government controls what you're allowed to do on the Internet? You can fight back. Follow our insider secrets and you'll learn how to beat web Censorship.

COVER FEATURE

Are you fed up with being told what you can and can't see online? **Robert Irvine** reveals who's controlling our web access and why, and tells you how to unblock unfairly censored content

You shouldn't really be reading this (don't stop, though!) because what we're about to tell you lifts the lid of one of the most controversial and contentious topics facing web users in the UK today: online censorship. You may associate the state control of what citizens can and can't access on the web with countries such as China, Russia and North Korea, but it's a sad fact that the United Kingdom has also been branded one of the 'enemies of the internet' for being at the "heart of censorship" (bit.ly/enemies390).

Naturally, as we explain in this feature, there are perfectly valid reasons for restricting access to certain types of web content – such as sites that contain child-abuse images or incite terrorist acts – but they're being used as a pretext to block harmless sites, without any explanation or redress. If the High Court has ordered ISPs to stop their users accessing a specific website, then what harm can it do to inform us of the reasons?

Over the next eight pages, we reveal who's responsible for censoring the most commonly targeted categories of website; offer advice for unblocking unfairly restricted content; and speak to the Open Rights Group (www.openrightsgroup.org) – a "digital campaigning organisation working to protect the rights to privacy and free speech online" – about what can be done to make online censorship fairer.

WHY WEB CONTENT IS BLOCKED

There are lots of reasons why online content is censored in the UK. Here, we look at the legal justification for blocking three types of website, and reveal who's behind the decision

Copyright Infringement

Why is it blocked?

Torrent sites that let you download and upload films, TV shows, music, ebooks and other copyrighted material are among the most common targets of ISP blocks, with infamous names such as The Pirate Bay, Popcorn Time and KickassTorrents officially banned in the UK. This is partly because sharing content without the copyright holder's consent breaches section 97A of the Copyright, Designs and Patents Act of 1988 (bit.ly/copyright390), but also (and, some say, mainly) because the companies that own that content want us to pay rather than get it for free.

Who's responsible?

More than 100 file-sharing services are currently blocked in the UK (you can see the full list at www.ukispcourtorders.co.uk) following orders from the High Court. These judgments require that the five big ISPs – BT, EE, Sky, TalkTalk and Virgin Media – restrict access to these sources of "pirated content" using network-level filters. The orders were requested by the members of several industry bodies including the British Phonographic Industry (BPI), the Publishers Association and the Motion Picture Association of America (MPAA), with a spokesperson for the latter describing court orders as "a proportionate and effective measure to tackle sites dedicated to facilitating and promoting online copyright infringement".

Some site owners have claimed that they can't be held responsible for the content that users upload, and that they are simply providing a means of distribution that could be used, for example, to share public-domain films and ebooks. However, the judge in last year's Popcorn Time ruling said the providers of the service did "plainly know and intend" for it to be used to infringe copyright.

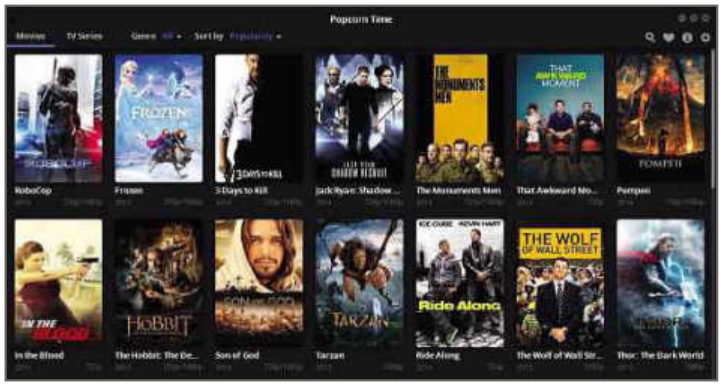


The Open Rights Group's 451 Unavailable campaign encourages ISPs to tell their users why sites are blocked

Is this fair censorship?

Although we obviously don't endorse the downloading of copyrighted material for free, trying to control file-sharing websites is like playing the fairground game Whack-a-Mole: as soon as you block one, another pops up. The entertainment industry's best option is to work closely with streaming and download services such Netflix and Amazon to offer good value and choice, so consumers aren't tempted to use piracy websites. A helpful start would be to remove pointless and unfair regional restrictions.

We also think it would be good practice for ISPs to offer clear explanations of why certain sites are forbidden, rather than just displaying a 'Page not found' message. This is the focus of the Open Rights Group's 451 Unavailable campaign (www.451unavailable.org), which wants ISPs to make clear why websites are blocked, and the courts to publish their blocking orders.



Popcorn Time is one of the most notorious free sources of films and TV shows and is blocked by court order in the UK

Extremism & Politics

Why is it blocked?

The Counter Terrorism Internet Referral Unit (CTIRU) was set up in 2010 by the Association of Police Officers to remove content from the internet that incites or glorifies terrorist acts, under Section 3 of the Terrorism Act 2006 (bit.ly/terrorism390). The CTIRU compiles a blacklist of URLs containing extremist material and, since November 2014, the big ISPs have incorporated this into their filters.

The CTIRU, which is the only unit of its kind in the world, also issues removal requests if content that encourages terrorist acts is hosted in the UK.

Who's responsible?

The CTIRU is controlled by the Home Office. As the terrorist threat in the UK has intensified, so the number of items blocked by ISPs has increased, with the Prime Minister warning in 2014 that the "new and pressing challenge is getting extremist material taken down from the internet".

Since 2010, it's estimated that the CTIRU has ordered the takedown of more than 120,000 items, much of it from social-media sites such as Facebook, Twitter and YouTube. The Home Office also now provides a tool for reporting "illegal terrorist information, pictures or videos you've



You can report terrorist content you see online via a page on the Gov.uk website

found on the internet" on its Gov.uk portal (bit.ly/report390).

Is this fair censorship?

We can't help feeling uneasy about the government's increasingly heavy-handed web censorship, especially David Cameron's declaration that: "We must not allow the internet to be an ungoverned space". Firstly, who put *you* in charge of the internet, pal? Secondly, the policy was implemented without public discussion and the CTIRU's criteria for identifying and blocking 'extremist' websites are subjective and vague, with worrying implications for freedom of speech. By adopting a 'proactive' approach to seeking out extremist content, the authorities can now go far beyond censoring terrorist propaganda to include political blogs, protest campaigns, opinion pieces and videos, even if the authors and publishers aren't breaking the law.



When did we vote to make David Cameron leader of the internet?

The privacy campaign group Big Brother Watch (www.bigbrotherwatch.org.uk) proposes that this problem could be solved by implementing a "legally sound blocking process" that requires a High Court injunction for ISPs to block extremist sites, similar to the orders used in copyright-infringement cases.

Another potential risk is that driving terrorists away from the public web will only induce them to use more devious and untraceable ways to communicate, radicalise and plot.

Pornography

Why is it blocked?

The internet opened the floodgates to pornography in the UK, but it's still more tightly regulated here than in most Western countries. Protective (if often ineffective) measures, such as age verification on adult websites and configurable ISP content filters, have been introduced to give parents peace of mind, but many categories of porn are blocked outright for everyone.

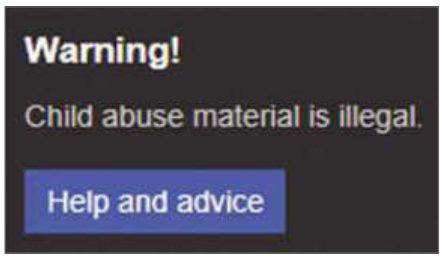


The IWF invites web users to report criminal online content through a tool on its site

Worst and foremost, of course, are child sex-abuse images, which are covered by legislation in the Protection of Children Act 1978 that states it is illegal to take, make, distribute, show or possess an indecent photo or pseudo-photo of someone under the age of 18. Then there are 'extreme' forms of pornography, both written and visual, which are prohibited by the Obscene Publications Act of 1959 (bit.ly/obscene390) and section Section 63 of the Criminal Justice and Immigration Act 2008 (bit.ly/criminal390), which makes it an offence for "a person to be in possession of an extreme pornographic image". Because anything you view online is saved to your browser's cache, accessing websites containing illegal content constitutes possession.

Who's responsible?

Since 1996, registered charity the Internet Watch Foundation (IWF, www.iwf.org.uk) has worked with the police and ISPs to minimise the availability of child sex-abuse images hosted anywhere in the world and criminally obscene adult content hosted in the UK. Since its inception, the IWF has assessed more than half a million web pages and, through its 'Notice & Takedown' policy, has succeeded in removing from the web 100,000 URLs containing criminal content. The IWF says that less than 0.3% of child sex-abuse images are now hosted in the UK, and all such content is taken down within four days. You can report illegal online material to the IWF through its website (www.iwf.org.uk/report).



Google and Bing display a warning if you use them to search for illegal content

Most UK ISPs use a blacklist of sites provided by the IWF to prevent access to illegal content, most notably BT's Cleanfeed filtering system. Other measures include the removal of links to inappropriate content (as identified by the IWF) by search engines Google and Bing; and, as of 1 January this year, the regulation of video-on-demand services by Ofcom (bit.ly/ofcom390).

Is this fair censorship?

The IWF's fight against child-abuse images is both necessary and commendable, but it has been criticised for its lack of accountability and the gradual expansion of its original remit, particularly because its decisions affect 95% of home internet connections. Indeed, in 2009, the IWF's blacklist was found to contain pages on legitimate file-sharing services such as SendSpace, which caused ISPs to block access to the rest of those sites.

It's also inevitable that people who want to view illegal material will find ways of doing so, regardless of blacklists and blocks. David Cameron has said that law-enforcement agencies are now targeting the so-called 'dark web' to combat the sharing of child sex-abuse images, but this is much easier said than done.

10 WAYS TO UNBLOCK WEB CONTENT

The complex nature of online censorship means there's no single trick to access forbidden content. Here, we explain the most effective methods for bypassing unfair blocks

1 TURN OFF YOUR ISP'S FILTERS

Unless you have children or you're particularly squeamish or prudish, you probably haven't paid much attention to the content filters that the government 'persuaded' ISPs to implement. But if you switch to a new internet provider, you'll find that parental controls are now pre-selected by default, which means you'll need to 'opt in' to access legal adult sites for pornography, dating, gambling, alcohol and tobacco, weapons and violence, and more. Sky recently went even further by automatically switching on its Broadband Shield filter for all new customers and for existing customers who hadn't specifically requested that it *not* be turned on. This protection may be handy for families, but for free-thinking grown-ups who prefer to set their own limits, it's a pain in the a***.

So here's how to turn off your ISP's filters. Note that this advice *only disables the parental controls*, not the network-level filters that block illegal content.

BT Parental Controls

Log into bt.com/mybt with your BT ID, scroll down to My Extras and click 'Personalise your settings' in the Parental Controls section. Move the slider to Off, then click the 'Delete settings' button.

Sky Broadband Shield

This one's easy: just go to broadbandshield.sky.com, log in with your Sky ID and click 'I don't want to use Sky Broadband Shield'. If you change your mind or decide you want some 'light' filtering, choose '18 – Suitable for adults only'.

TalkTalk HomeSafe

Sign into your TalkTalk account at account.talktalk.co.uk, select 'Extras & offers' from the menu at the top, then click Manage HomeSafe. Click the Off button in the Kids Safe section and confirm the decision to disable the content filter. You can also turn off Virus Alerts, if you're confident that your security software offers sufficient protection.



If your ISP's content filters are interfering with your browsing, you can turn them off

Virgin Media Web Safe

Go to the My Apps section of your My Virgin Media account (myvirginmedia.com), select 'Parental Controls with Virgin Media Web Safe'. Click Manage Web Safe and turn off Child Safe and, optionally, Virus Safe.

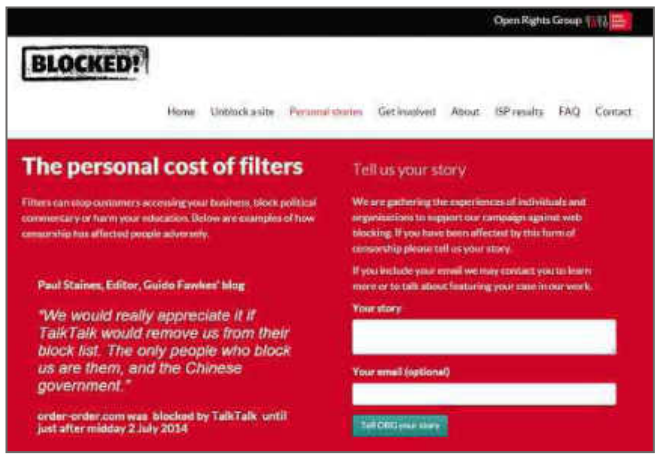
2 REPORT UNFAIR BLOCKING TO YOUR ISP

ISP filters work automatically by detecting blacklisted keywords and domains, so they sometimes block harmless sites that aren't breaking any laws. The Open Rights Group (ORG) has a subsidiary site called Blocked (www.blocked.org.uk), which highlights several examples of mistakenly blocked sites including a craft watchmaker, a women's clothing site and a Porsche retailer. Such 'overblocking' is more common than you'd think, with the ORG finding that one in five of the 100,000 most popular websites in the UK is blocked by at least one network.

If you own a website that's suddenly being blocked, or you know of one that's being unfairly censored, report it to your ISP and, hopefully, it will adjust its filters when informed that it's made a mistake. Here are contact details for the main internet providers:

BT – categorisation@bt.com
EE – safeguard@ee.co.uk
Sky – CRSupport@bskyb.com
TalkTalk – homesafe.classification@talktalkplc.com
Virgin Media – websafefeedback@virginmedia.co.uk

You can also notify the ORG about unfair censorship to help it monitor overblocking, by emailing info@openrightsgroup.org

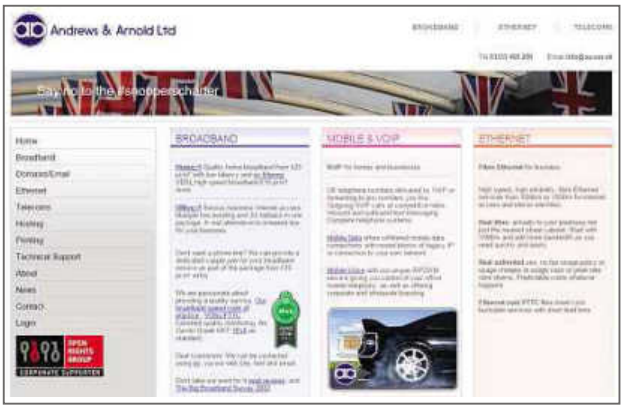


The Open Rights Group monitors overblocking and helps sites resolve the problem

3 SWITCH TO A LESS POPULAR ISP

The court orders that restrict access to specific websites generally only apply to the five big ISPs (now four, since BT and EE have merged). If you're frustrated by the blocks imposed by your current service, consider switching to a smaller broadband provider (with fewer than 400,000 customers) that isn't affected by the legal rulings. ISPreview provides a comprehensive list of UK ISPs, complete with details of monthly fee, download and upload speeds, and data allowance, at www.ispreview.co.uk/isp_list.

Additionally, there are two ISPs that don't use the IWF's 'voluntary' blacklist to block websites: Andrews & Arnold (also known as AAISP, aaisp.net), whose owner calls government-imposed web censorship "the very definition of 'nanny state'" (bit.ly/nanny390); and Zen Internet (www.zen.co.uk), which supports the IWF



AAISP prides itself on offering its customers unfiltered and uncensored internet access



The BBFC advises mobile networks about which content they should block and allow in their filters

through financial membership, but doesn't enforce its block list.

4 REPORT UNFAIR MOBILE BLOCKS TO THE BBFC

You're probably familiar with the British Board of Film Classification (BBFC, www.bbfc.co.uk) for its age ratings for movies but, since 2013, it's also had an influence on the content you can and can't see on your phone. Although the BBFC doesn't classify individual websites, it helps to ensure that the default filters applied by mobile networks aren't too strict or too lenient by maintaining a 'Classification Framework'. This is intended to stop users aged under 18 accessing content that includes sex, drugs, strong violence, self-harm and discrimination, though anyone who has sat near a group of teenagers on a bus may question its effectiveness!

Interestingly, mobile operators assume that you *are* under 18, unless you indicate otherwise, so if you find that many sites are blocked when you try to access them on your phone, you should contact your network to verify your age – this can usually be done by presenting your passport or making a credit or debit card payment.

If your mobile provider refuses to remove a specific site from its content filter, you can appeal to the BBFC at

HOW WEB CENSORSHIP NEEDS TO CHANGE

We spoke to Pam Cowburn, Communications Director of the Open Rights Group (www.openrightsgroup.org) about the current state of online censorship and how it can be improved



Is some degree of web censorship necessary to prevent the spread of extremism and images of child abuse, or does this just drive content underground?

Free speech has its limits and the police have a duty to close down content that incites violence or promotes criminal acts, such as child abuse. However, it is important that this is done in a fair and open way, particularly when it comes to political content, where it may be more difficult to define whether a site is actively promoting violence or just propagating unpleasant but legal views.

There is a difference between blocking URLs and trying to close down websites and target the people behind them. Blocking URLs may be the easiest option in stopping the spread of, for example, child-abuse images but it doesn't mean that the images have been removed, and people who want to see them will look for ways to get around blocks. The police should not favour blocking over seeking ways to close down sites completely and bring the people behind those sites to justice.

How is the Open Rights Group (ORG) working to ensure that the Investigatory Powers Bill (the so-called Snooper's Charter) does not deprive web users of internet freedoms?

ORG has made a submission to the Joint Committee that is scrutinising the IPB, raising our main concerns with the Bill. We are also trying to raise public awareness of the implications should this Bill be passed in its present format. With the support of our members, we will lobby MPs and members of the House of Lords to persuade them to vote for amendments that will ensure that the Bill protects the rights of UK citizens.

Website blocking should always go through the courts to ensure that decisions are independent and fair. However, while blocking may disrupt criminal activity, it doesn't necessarily solve the problem or bring those responsible to justice.

Should the courts be obliged to explain why they have ordered ISPs to block specific websites?

Yes, this would ensure that the process is transparent and give website owners the ability to appeal. Our concern is that nobody represents users in these processes. If ISPs do not challenge court orders, then rights holders [who

ISP	Result	Last check on	Last blocked on
AAISP	ok	2016-01-26 12:12:12	No record of prior block
BT-Light	blocked	2016-01-26 12:12:11	2016-01-26 12:12:11
BT-Moderate	blocked	2014-07-03 16:40:22	2014-07-03 16:40:22
BT-Strict	ok	2014-06-03 01:10:13	No record of prior block
EE	blocked	2015-07-29 11:14:50	2015-07-29 11:14:50
O2	blocked	2015-01-21 11:24:02	2015-01-21 11:24:02

Your mobile network may block a website that other internet providers allow

bit.ly/bbfc390, which will resolve the complaint within five days. Research by the Open Rights Group and other campaigners has found that networks have unfairly blocked hundreds of websites, blogs and forums, including a pop-gossip site, a creative-writing blog, a tweet archive, a Sheffield church group and Shelf Appeal (shelfappeal.com) – "a blog about putting things on a shelf" (bit.ly/mobile390). You can find out whether your mobile provider is blocking a particular site by entering its URL at www.blocked.org.uk (see final answer below).

5 DISCOVER THE PAGES THAT GOOGLE HIDES

The EU's 'Right to be forgotten' ruling in May 2014 has so far forced Google to remove more than 479,000 links from its search results, because their content could cause individuals to be "perpetually or periodically stigmatised as a consequence of a specific action performed in the past". Google's Transparency Report (bit.ly/transparency390) says it's complied with around 42% of removal requests, and provides anonymised examples. The pages themselves remain online and uncensored, but without knowing their exact URL, finding them without the help of a search engine can prove impossible.

One way around this is to switch to the US version of Google, which isn't affected by the 'Right to be forgotten' ruling. Go to www.google.com in your browser and you'll probably be redirected to www.google.co.uk, so click the 'Use Google.com' link in the bottom-right corner – or just go to



Google says it has complied with 42.4% of more than 1.3 million requests to remove links from search results

may have a vested financial interest] can obtain them without much real discussion, except around implementation.

ISPs could also do more to make blocking transparent, so errors and scale can be properly detected.

Are ISPs going too far with the strict filters that they are now obliged to offer customers?

The four main ISPs voluntarily agreed to implement filters and give customers a choice about whether they wanted them or not. However, Sky has recently gone one step further by automatically activating filters for new customers so they have to request that they are removed. This is not giving customers an informed choice about filters. The same applies to mobile providers.

All ISPs and mobile providers need to make customers aware that these filters sometimes censor websites that are not harmful, and are not guaranteed to block all websites that are unsuitable for under-18s. They should also tell customers that the best way to keep children safe online is to talk to them about their internet use and encourage them to develop the skills they need to navigate the web safely.

Is transparency about online censorship a fair compromise between blocking sites and treating web users with respect?

Yes, some online censorship is always going to be necessary, but if the process if transparent, fair and independent, web users' rights can be respected. However, as already pointed out, blocking can be problematic and is not in itself the only solution to genuine social problems. So, for example, Internet filters cannot guarantee that a child will be safe online.

Censorship of material, such as libellous or hate speech, at source, also needs the same level of transparency to remain accountable.

How can *Web User* readers help to unblock web content and sites that have been unfairly censored by ISPs?

Your readers can use our Blocked tool (www.blocked.org.uk) to check whether websites have been blocked. There is guidance on the site for how they can then contact ISPs about incorrect blocks. It would be very helpful if they also let us know about any incorrect blocks (by emailing info@openrightsgroup.org) so we can monitor the impact of overblocking.



You can use ORG's Blocked tool to find out if a specific website is being blocked by your ISP



The BBC provides links to articles that Google has removed in the interest of transparency

www.google.com/ncr to avoid redirection.

There are also several places you can view the URLs removed by Google, so you can access the original content. These include Hidden From Google (hiddenfromgoogle.com), which lists 30 examples; and a BBC blog post from last year (bit.ly/bbcblog390) that links to hundreds of BBC News articles that are now hidden from Google when you search for specific names. "To do anything else risks reducing transparency and damaging trust," says a defiant Auntie Beeb.

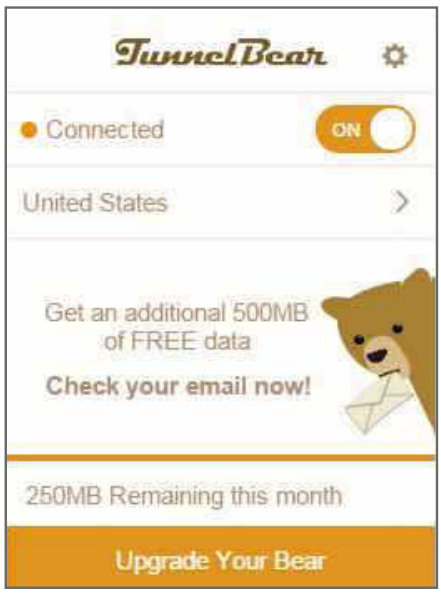
6 UNBLOCK CENSORED CONTENT USING A VPN

Virtual private networks (VPNs) aren't just a means of beating geographical restrictions (to watch US Netflix, for example), they're also an effective way to unblock censored web content. VPNs use a different port to connect to the internet, so your ISP will be able to tell that you're using one, but it won't be able to see exactly what you are accessing. And VPNs are perfectly legal – many people rely on them for work – so your ISP won't disconnect you. The upshot of this is that you can visit sites that you're not officially allowed to in the UK, including those that have been censored by the courts, the government and/or your internet provider.

It's true that some VPNs, especially free ones, slow down your connection, place a cap on the amount of data you can download and interrupt your browsing with ads. But if you only want to access one or two forbidden sites, we'd recommend the free versions of TunnelBear (www.tunnelbear.com) and CyberGhost (www.cyberghostvpn.com), both of which work on Windows, Mac OS X, Android and iOS, and offer reliable and reasonably fast download and upload speeds.

If you're planning to use a VPN all the time, for unrestricted and anonymous web access, it's worth upgrading to the paid-for versions of the aforementioned services or, our current favourite, F-Secure Freedome (bit.ly/freedome390). This costs £39.99 per year for use across three devices, and offers unlimited, speedy and secure bandwidth. It's available for Windows, OS X, Android and iOS.

Note that browser-extension VPNs such as Hola (hola.org) may not encrypt your data, so your ISP could detect what you're using them for.



Use the free version of TunnelBear to access the occasional censored website



To use a VPN all the time, it's worth paying for a service such as Freedome

7 WATCH VIDEOS THAT YOUTUBE CENSORS

According to the 'Requests to remove content' section of Google's Transparency Report (bit.ly/govremove390), the company receives more government requests to remove content from YouTube than any of its other services (it is the third most popular website in the world). Google complies with around half of these requests – either for legal reasons or because a video violates its Community Guidelines (bit.ly/community390). Once a video has been deleted, there are a couple of tricks you can try to find and watch the censored content, although neither is guaranteed to succeed.

Even though a clip has been taken down from YouTube, it may still be hosted on a lower-profile video site that isn't being so closely monitored by lawyers. Try Dailymotion (www.dailymotion.com), Metacafe (www.metacafe.com) or Videobash (www.videobash.com).

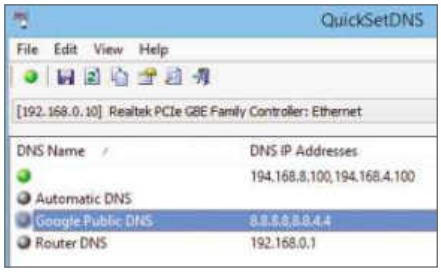
There's also a chance that you can find a cached version of the video through the Internet Archive's Wayback Machine (web.archive.org) if you know its original URL. However, due to the volume of content on YouTube, this often only works with popular videos.



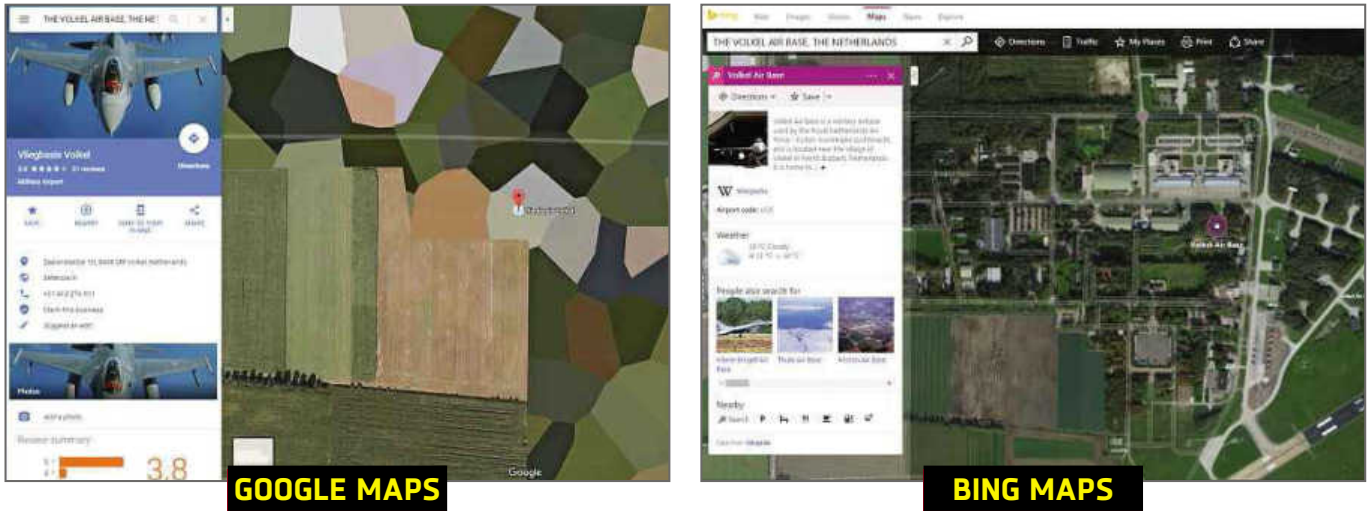
A video removed from YouTube for legal reasons may still appear on another site

8 CHANGE YOUR DNS SERVER

Another way to bypass web filters is to switch from the DNS (Domain Name System) servers provided by your ISP to alternative DNS servers, such as those



Switching DNS server may unblock censored content, but it's a long shot!



Certain locations, such as the Volkel Airbase in the Netherlands, have been censored in Google Maps but not in Bing Maps

provided by Google Public DNS (bit.ly/googledns390). Potentially, this could gain you access to sites that are blocked in the UK, by making it seem as if you're using a different IP address based abroad, but many internet providers are wise to the trick.

You can make the switch manually by entering the details provided by the DNS service, but it's easier to use a dedicated tool such as QuickSetDNS (www.nirsoft.net). If it doesn't work, you can easily switch back to your ISP's default DNS servers.

9 USE THE TOR BROWSER

Tor (www.torproject.org) is widely regarded as the most secure way to browse the web and is an effective means of accessing content that has been unreasonably blocked in the UK. However, it's also controversial because the anonymity offered by the browser has made it popular with criminals and other unsavoury types who use it to evade surveillance and hide their activities from the authorities.

Tor is available for Windows, OS X and Linux and, although it isn't the simplest program to get started with, you'll find extensive instructions and help on the website.



Tor protects your privacy and allows you to access content that's blocked in the UK

10 VIEW AREAS CENSORED IN GOOGLE MAPS

Google Maps and Earth provide an aerial view of most locations in the world, but there are plenty of notable exceptions. Sometimes this is due to glitches in the satellite imagery but, in other instances, individuals, businesses or governments have requested that their property be obscured from view. Check out the Huffington Post's article '24 Places Google Maps Doesn't Want You To See' (bit.ly/huffpo390) or News.com.au's 'Secret sites so classified they are pixelated by Google Earth' (bit.ly/news390) for some fascinating examples.

Although there's no way of revealing these mysteriously concealed areas in Google Maps, rival mapping service Bing Maps (www.bing.com/maps) uses its own aerial photography, which is often higher quality and – more importantly – uncensored. For example, in Google Maps the Volkel Airbase in the Netherlands is covered by a camouflage pattern, whereas in Bing Maps it's completely visible. Perhaps the Dutch authorities didn't think enough people used Bing for it to be a security concern! ■

NEXT ISSUE on sale Wednesday 24 February 2015

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Use ANDROID without GOOGLE

If you're not happy about Google accessing you personal information, you can simply remove the search giant's influence from your Android device. **Wayne Williams** explains the alternatives

Use other app stores

Google Play is by far the most popular Android app store, but it's not the only one. Amazon has its own app store (bit.ly/amazonapps390), which offers some excellent bargains and daily giveaways – not just for Kindle Fire users, but all Android phones and tablets.



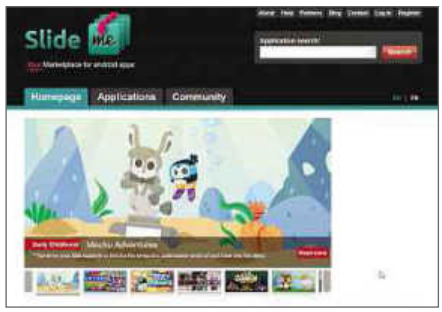
Furthermore, its Amazon Underground app, which you can get by visiting amazon.com/underground from your Android device or by entering your email address at bit.ly/underground390, offers thousands of pounds' worth of paid-for apps, games and in-app items for free.



Other app stores to consider include F-Droid (f-droid.org), which focuses on free and open-source content, and SlideME (slideme.org), which reviews all the content it offers to ensure you don't install dodgy and rubbish apps.

Samsung has its own app store (bit.ly/samsungapps390) as does LG (bit.ly/lgapps390) so if you own one of their devices, be sure to check them out.

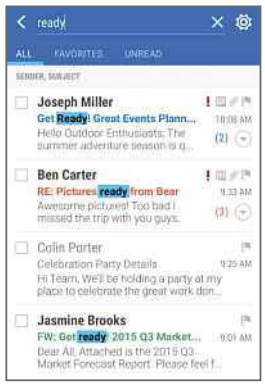
None of the listed stores have the breadth of content offered by Google



Play, but you should be able to find most – if not all – of the apps you need for everyday tasks, as well as plenty of games and entertainment services.

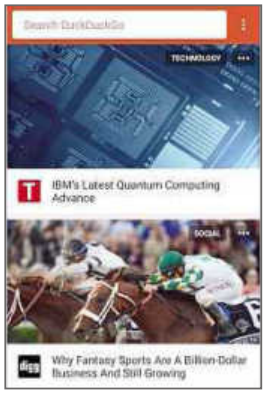
Use built-in (non-Google) apps

Depending on the make of your device, there's a good chance it will come with preinstalled alternatives to Google services. The big Android manufacturers such as Samsung, HTC and LG all provide their own apps, which don't require Google to work. For example, your phone will probably have an email client in addition to Gmail, which you can use with any email account. You may even prefer the apps from your device's manufacturer to the ones Google provides, although these often don't get used and are regarded as 'bloatware'.



Install alternative apps to Google's

There are plenty of alternative apps you can use instead of preinstalled Google products. DuckDuckGo (duckduckgo.com/app) lets you search the web anonymously without being tracked, while the brilliant free mapping tools Maps.me (maps.me) and Here Maps (maps.here.com) let you download maps of entire countries to navigate offline.



Rather than using Gmail, which scans your messages to target you with emails, try BlueMail (bluemail.me) or AquaMail (www.aqua-mail.com), which work with any email account you want to use and have simple but sophisticated interfaces.

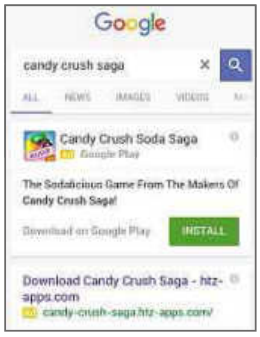
If you're not tied to Google Drive, you could instead use Microsoft's OneDrive (onedrive.live.com) for your documents, or for photos try one of our alternatives recommended on page 44. And if you're worried about Chrome collecting your information as you browse the web, there are plenty of other choices available, including Firefox for Android (bit.ly/firefox390) and the highly rated Dolphin (bit.ly/dolphin390).

Of course, certain Google apps and services can't be so easily replaced – YouTube being the obvious example – but there alternatives to many services that don't share your personal data.

Install apps directly from search

Google now lets you install apps simply by searching for them, without first needing to visit its Play Store. All you have to do is search in your browser for the app you want, then click the Install button in the results. You'll be

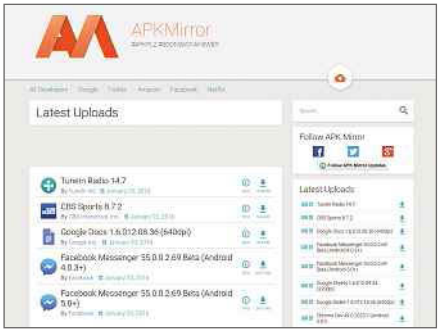




presented with all the permissions you'd normally see before installing the app. Although this trick bypasses the Play Store, it doesn't avoid Google altogether because you still need to use its search engine.

Sideload apps from outside Play

Some apps are blocked from Google Play because they include tools that Google doesn't want running on Android (certain ad blockers, for example). If you still want to install them, you just need to find the app in APK (Android Application Package) format – try the developer's website or the comprehensive APK Mirror (www.apkmirror.com), then sideload them.



To do this, open Settings on your Android phone and look under Applications or Security for the Unknown Sources option. Tick this and you'll be able to download apps packaged as an APK, and install them directly on your device. There is a security risk involved in installing apps in this way, so make sure the app you want is safe and comes from a trustworthy source.



Remove Google services by rooting your device

Some of Google's stock apps and functions (such as Google Play Services) can only be removed by rooting your device. You'll need to use a tool such as Towelroot (towelroot.com) or Kingo (www.kingoapp.com). To install Towelroot, go to the website on your phone or tablet, and tap the lambda symbol (λ) to save the app in APK format, then install it. For Kingo, download Android Root for Windows from the website.



Connect your phone via USB, run the program and follow the instructions. The usual caveats apply about rooting – it invalidates your warranty, leaves you open to more security threats and can even 'brick' your device (render it unusable).

Once your phone is rooted, you'll be able to remove all the apps you don't need. But before you strip your device of everything Google-related, it's worth noting that some third-party apps require Google Play Services to run properly. So bear in mind that if you disable this function, you may find that certain apps stop functioning.



Install a custom ROM on your device

There are several excellent custom ROMs you can install on your phone or tablet to replace the default Android OS, of which CyanogenMod (www.cyanogenmod.org) is arguably the best. This is like the latest version of Android but with a lot of additional functionality. If your phone is running an old version of Android, and there's no sign of an update on the horizon, installing this will give you access to all the features and functionality you've so far been denied, and you can customise it to suit your tastes.

Installing CyanogenMod is easy. Make sure your phone is set to install apps in APK format, then go to get.cm on your phone. Download and install the ROM and follow the onscreen instructions. You'll need to connect the phone to your computer via USB and run the CyanogenMod Windows Installer from www.cyanogenmod.org to install the ROM. ■



THE PROS AND CONS OF DITCHING GOOGLE

The main benefit of removing Google from your Android phone is privacy. The search giant knows far more about you – where you are, what you do and what you like – than you might be entirely comfortable with, and eliminating its presence from Android will make you feel less exposed.

There are clear downsides, however, because Google is responsible for some very good apps and services, and you may end up trading those for less capable alternatives. As we mention above, certain third-party apps rely on Google to work properly, so you could end up losing them in your quest to quit the search giant.

Google Play delivers timely updates to apps, which you probably won't get if you use alternative app stores, so you'll have to wait longer for new features and bug fixes to arrive. You also won't get the latest updates to the Android OS until custom ROMs have been updated accordingly.

Best photo-storage services

Backing up your photos to the cloud means you can take them with you wherever you go. **Edward Munn** tests the six best services for organising and sharing your photos online



Google Photos | From free | photos.google.com | ★★★★★

FEATURES ★★★★☆ PERFORMANCE ★★★★★ EASE OF USE ★★★★★ VALUE FOR MONEY ★★★★★

WebUser GOLD AWARD

What we liked:

Google Photos offers a range of storage options to suit different requirements. Most users will take advantage of its generous free unlimited plan, which keeps your files at slightly reduced quality (and size, if your images are larger than 16 megapixels). Although it compresses your images, we could hardly tell the difference when viewing them at 2.5 times their actual size. For serious photographers who want to keep copies of their original files in the cloud, there's a 15GB free allowance (shared across all Google services – Drive, Gmail and the rest), or you can upgrade to 100GB of storage for a mere $2.39 (around £1.55) a month.

Like Flickr, Photos has apps for Android and iOS that can be set to automatically back up your new snaps over 3G/4G and Wi-Fi. If you prefer organising photos from your PC, the service can be accessed by visiting photos.google.com from any browser and there's also a Desktop uploader (photos.google.com/apps) that can be set to upload photos from your camera, SD card and folders on your PC.

The standout feature, though, is Photos' interface, which is very easy to get to grips with. Sharing images is as simple as selecting them and tapping 'Create link', and there are quick options for editing and downloading your files or adding them to a new album. If you want a tool that organises everything quickly and easily, Photos is undoubtedly the best service: your holiday snaps are automatically collated in shareable 'Stories' and the app's search function intelligently sorts images by subject and location to help you find all your photos of, for example, dogs or beaches.



Another excellent feature frees up storage on your device by deleting files that have already been backed up to the cloud.

How it can be improved:

We'd love to see Photos offer the same generous 1TB of free storage as Flickr, for photos preserved at their original image quality. The service's shared albums could also be improved by the introduction of options to 'like' and comment on pictures.

OUR VERDICT

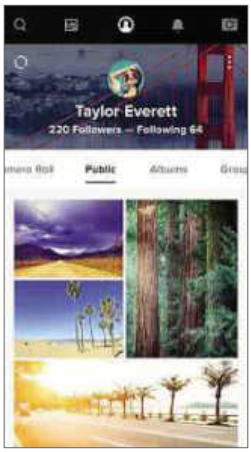
Google Photos makes storing and organising your photos in the cloud easier than ever. It doesn't offer the same amount of free storage at full quality as Flickr but, thanks to its excellent tools, easy interface and reasonably priced paid-for plans, it wins our Gold Award. Look out for secret photo tips in our next issue.

Flickr | From free | www.flickr.com | ★★★★☆

FEATURES ★★★★☆ PERFORMANCE ★★★★☆
EASE OF USE ★★★☆☆ VALUE FOR MONEY ★★★★★

WebUser SILVER AWARD

What we liked:



Flickr is best known for offering a whopping 1TB of free storage and, unlike our Gold Award winner, it doesn't compress your images. This enormous allowance makes it the perfect choice for serious photographers and anyone who wants to keep all their photos online at original quality for free.

Like Google Photos, Flickr has apps for Android and iOS that automatically back up all your new photos; a web app; and a Desktop uploader (for Windows and Mac) that can be set to upload images automatically from your folders, hard drives and SD cards.

Where it differs from Photos is that setting up a Flickr account entails creating a profile on a social network. Although auto-uploads are all private (and you can choose to keep it this way), the service is geared towards showing off your photography by sharing images and entire albums. Like Twitter or Instagram, you can follow other photographers, and 'like' and comment on posts. Each image also displays the number of times that it's been viewed.

How it can be improved:

If you just want somewhere to store your photos, you'll find Flickr's social-networking features a distraction. And its apps and website can't compare to the design and simplicity of Photos.

OUR VERDICT

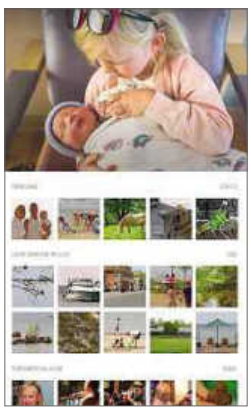
If you want to upload thousands of images at original quality or be part of a community of photographers, Flickr is the best service. However, its interface isn't as slick as Photos.

Shoebox | From free | shoeboxapp.com | ★★★★☆

FEATURES ★★★☆☆ PERFORMANCE ★★★★☆
EASE OF USE ★★★★☆ VALUE FOR MONEY ★★★★☆

WebUser BRONZE AWARD

What we liked:



Less well-known than our Gold and Silver award winners, Shoebox offers free unlimited photo storage at 'high quality', or you can upgrade to unlimited storage at original quality for a reasonable $5 (about £3.50) a month.

When you first sign up to the service, Shoebox invites you to download its Desktop app, which lets you choose folders on your PC to sync with the cloud. The mobile apps for Android and iOS work in much the same way as Flickr and Photos, automatically backing up your smartphone snaps via mobile data or Wi-Fi.

Uploaded images can be managed with any of the apps or by logging in to the Shoebox website. The interface is simple and easy to use, displaying your photos in a chronological timeline, with shortcuts to jump to a specific month or year, and tools for browsing by location and season. Photos can be shared either by creating links or by making shared galleries, which can be used collaboratively with friends and family.

How it can be improved:

Shoebox is rather short on features compared to our other award winners. It could do with some basic photo-editing tools and the option to store some original-quality files for free.

OUR VERDICT

If you want to store more than 1TB of photos at original quality, Shoebox's $5-a-month plan represents the best value for money. Otherwise, you're better off using one of the more popular services.

BEST OF THE REST

Apple iCloud Photo Library

bit.ly/icloud390



If you use only Apple devices, iCloud Photo Library is an excellent service for storing all your photos in one place. You're offered 5GB of free storage, but upgrading to a 50GB or 200GB allowance costs only 79p or £2.49 a month, respectively. To ensure that your phone's storage isn't filled up too quickly, your original photos are uploaded to the cloud and only optimised versions of your snaps are kept on your device. Unfortunately, the service is not currently compatible with Android.

Amazon Prime Photos

bit.ly/amazon390



Like Apple, Amazon offers 5GB of free cloud photo storage and you can upgrade your allowance from as little as £6 a year (for 20GB). If you're a Prime member (£79 per year), you're entitled to unlimited, original-quality uploads, which is pretty good value even if you don't use the other membership benefits. The Amazon Cloud Drive app is available for PC, Android and iOS, but it's lacking in features compared to our award winners.

OneDrive

bit.ly/onedrive390



Microsoft doesn't offer a dedicated photo-storage app, but you can use OneDrive to store 15GB of image files for free and it can also be configured to back up all the snaps you take on your smartphone. If you need more storage, subscribing to Office 365 for £5.99 a month boosts your OneDrive storage to a whopping 1TB, which also gets you all the office software, making it great value for money.

Broadband Deals

Call FREE on 0800 083 2357 to switch your broadband

	Provider	Package name	Monthly price	Contract length	Broadband speed	Allowance	First-year cost*
1	TalkTalk	TalkTalk: Broadband	£7.50 (FREE for 18 month)	18 months	17Mbps max speed	∞ unlimited	CHEAPEST £0.00
2	sky	Sky: Broadband	£10.00 (FREE for 12 months)	12 months	17Mbps max speed	∞ unlimited	£0.00
3	plusnet	Plusnet: Broadband	£9.99 (£1 for 18 months)	18 months	17Mbps max speed	∞ unlimited	£12.00
4	EE	EE: Broadband & Calls	£9.95 (£1 for 12 months)	12 months	17Mbps max speed	∞ unlimited **	£12.00

Terms & Conditions apply - see ISP sites for details
*First-year cost does not include line rental. Cost is calculated at monthly price x12 with all introductory offers subtracted. Additional charges incurred outside of free inclusive calls not included in first-year cost.
** Fair-usage or restriction policy applies.

Data supplied by www.broadbandgenie.co.uk. Correct as of 27 January 2016.

Ofcom

Broadband Genie's helpline is powered by Simplify Digital, the Ofcom-accredited switching service

In the next issue of our sister title Computeractive...

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- Best way to edit the Windows Registry
- Top 10 NirSoft programs
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On sale Weds 17 Feb

Take a Screen Break

Give your eyes a rest from your computer by taking our fiendish fortnightly challenges. Can you unravel our social-network-themed word search and guess our song-title emoji?

WEB USER WORD SEARCH

Can you find the following social networks in the grid on the right? Names may appear vertically, horizontally or diagonally, and forwards or backwards

FACEBOOK
GOOGLEPLUS
INSTAGRAM
LINKEDIN
PINTEREST
REDDIT
STUMBLEUPON
TUMBLR
TWITTER
YOUTUBE

B	P	T	I	D	D	E	R	A	C	S	N
Z	I	S	K	G	S	A	P	N	T	F	I
K	Z	E	A	O	Y	Q	G	U	N	T	D
M	R	R	U	O	O	A	M	G	K	L	E
A	E	E	X	G	V	B	R	J	U	O	K
R	B	T	Y	L	L	W	E	B	C	S	N
G	U	N	T	E	J	E	T	C	B	F	I
A	T	I	U	P	B	T	T	K	A	B	L
T	U	P	M	L	K	P	I	Q	C	F	Y
S	O	Y	B	U	Z	O	W	R	Z	J	X
N	Y	F	L	S	X	G	T	P	N	V	B
I	S	W	R	D	M	T	V	A	Q	C	V

CAN YOU IDENTIFY THESE SONG TITLES FROM THE EMOJI?

1 

2 

3 

4 

Get the answers online at bit.ly/quiz390

COMPETITIONS

WIN a Canary home security system

WORTH £159



If you're whisking your loved-one away for a romantic weekend to celebrate Valentine's Day, you can still keep an eye on your home using Canary. This all-in-one home-security system streams real-time video of your home to your phone in 1080p high definition. It's easy to set up – just plug it in and connect it to your Wi-Fi. To enter, email your address to webusercomp@dennis.co.uk with 'canary' in the subject line. For more info visit https://canary.is and follow @canary on Twitter.

WIN a NETGEAR Nighthawk X4S

WORTH £259



NETGEAR's Nighthawk X4S won the Gold Award in our router Group Test in Issue 388. It's fast on both the 2.4GHz and 5GHz bands, and has four Gigabit Ethernet ports and an Ethernet WAN port. It's one of the few routers available with ADSL and VDSL, so it works with any type of internet connection. To enter, email your address to webusercomp@dennis.co.uk with 'Nighthawk' in the subject line. For more info visit www.netgear.co.uk and follow @NETGEAR_UKI on Twitter.

Keep your passwords safe with LastPass 4 | lastpass.com

The recently updated LastPass safely stores all your login details in the cloud and offers some useful additional features. Here's how to use it

It's important to use different passwords on all the websites you sign up to, so if one site gets hacked and your login details are exposed, the attackers won't be able to use your password to gain access to other sites. At the very least, you need different logins for your email and any social networks you use. But thinking up long, hard-to-guess passwords – and remembering them each time you log in – can be difficult, and that's where password managers such as LastPass come in. The service stores your passwords securely online, and logs you in to any site – and from any device, too. It can also store important personal information, such as credit card details. LastPass now has a new look and some welcome extras that make it even simpler and smarter.



1 Download the program and install it. Select the Advanced install option to choose the browsers on which you want to use LastPass add-ons, 1 and to manage the Privacy Options. 2 You can boost your privacy further by preventing the tool from logging in automatically and storing your login history.



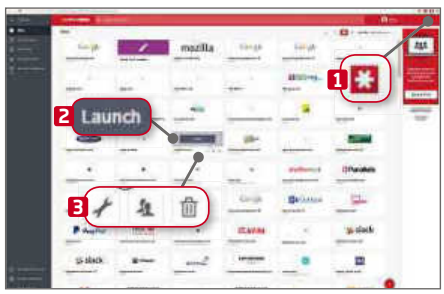
2 Make sure all browser windows are closed. On the next page, choose to create a new account (unless you already have one) and enter a master password of at least eight characters. This will protect your other passwords, so make it a good one. LastPass will now find any unsecured logins on your computer. 1



3 Tick the Reveal Passwords box 1 if you want to see the passwords for those sites. Click Import 2 to add the logins to LastPass's password vault. Be aware, however, that importing them into LastPass also removes them from your browser. To skip this stage, click No Thanks. 3



4 If you need to install a LastPass add-on in your browser, you'll be able to do so now. When you go to a site you have an account with, click the login box and you should see the LastPass asterisk. 1 Click this and select the account to use. 2 LastPass fills in your details and you'll be able to log in.



5 Your passwords are stored in an online vault that you can access through your browser's LastPass button. 1 The redesigned vault provides easy access to all your sites. To log into an account, just hover your mouse over its tile and click Launch. 2 You can also Edit, Share and Delete a site. 3

FORM FILLS

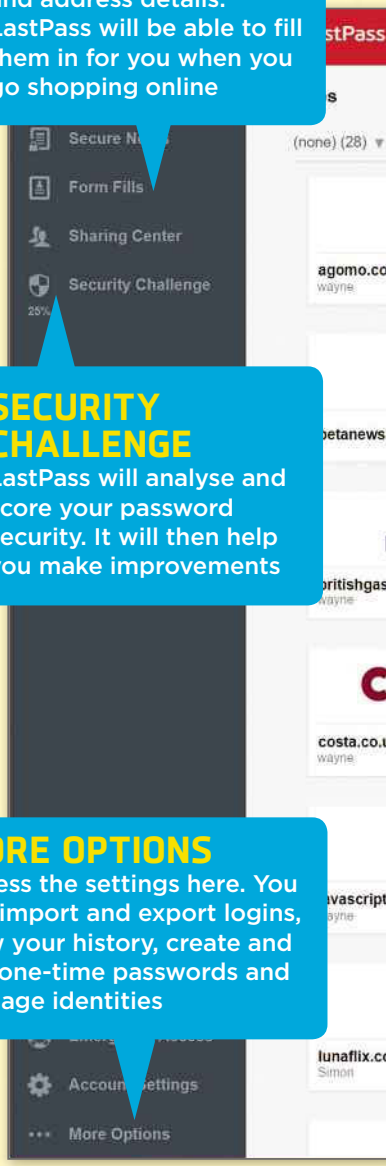
Add your payment cards and address details. LastPass will be able to fill them in for you when you go shopping online

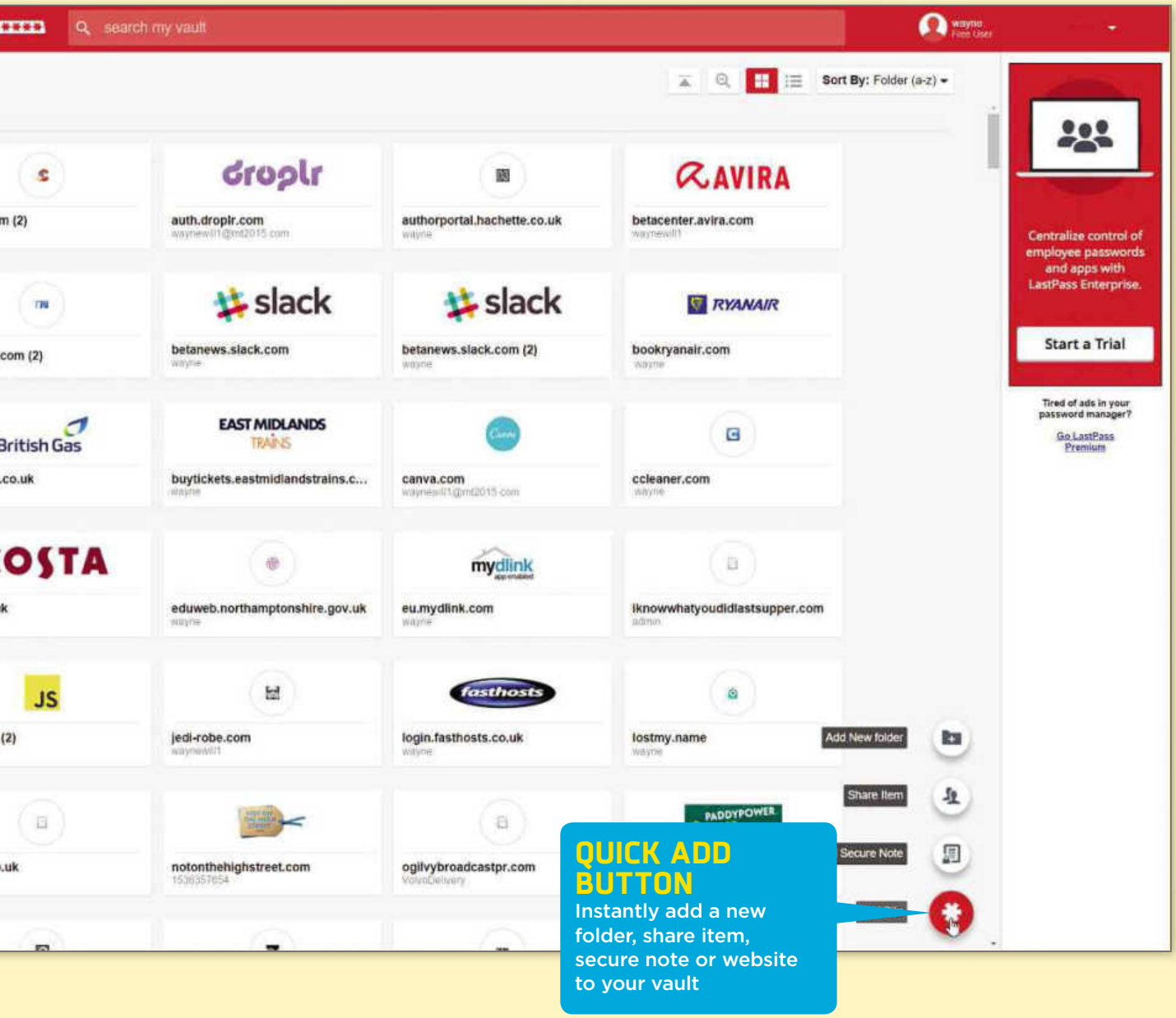
SECURITY CHALLENGE

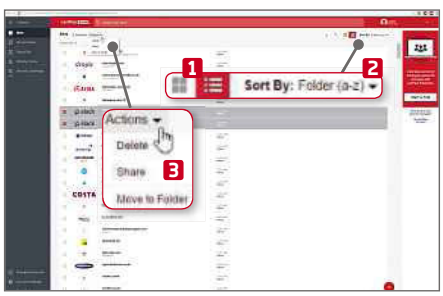
LastPass will analyse and score your password security. It will then help you make improvements

MORE OPTIONS

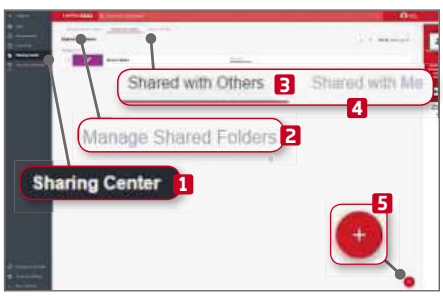
Access the settings here. You can import and export logins, view your history, create and use one-time passwords and manage identities







6 You can switch between list view and grid view, **1** and use the down arrow **2** to sort sites by folder, name or most recent. Select one or more sites and you can apply various actions, **3** including deleting, sharing and moving them to a new folder. To share an item, just enter an email address.



7 The new Sharing Center **1** lets you manage passwords and secure notes that you've shared with others. Hover your mouse over an item to edit it. **2** You can also manage shared folders **3** and items that other people have shared with you. **4** Click the plus-sign button **5** to share something new.



8 Emergency Access **1** is another new feature. It lets you give trusted friends and family access to your password vault in case something bad happens to you. Click the plus sign **2** and enter the person's email address **3** along with a wait time. **4** You can decline access during that time (if you are able).

Download true quality audio and video from YouTube

Freemake Video Downloader: bit.ly/fmvd390 | 10 mins | XP, Vista, 7, 8, 10

Freemake Video Downloader has always let you download videos and convert them to audio MP3 files, which you can save and play even when offline. However, compressing YouTube's audio into MP3 leads to a loss in quality. The latest version of Freemake lets you download audio as M4A files – the same format YouTube uses – so files don't need to be converted and there's no loss in quality. Most music software will play M4A files, including Windows Media Player, iTunes and VLC.

Freemake's software comes bundled with optional adware, so make sure that you read all the installation options very carefully and opt out of anything you don't want. See our expert tip for the settings we chose. Some antivirus software may flag it as potentially harmful, because of its opt-out adware, but it's safe to use if you install it with care.

Copying audio and video for personal use shouldn't get you into trouble, but don't share or republish your downloads.





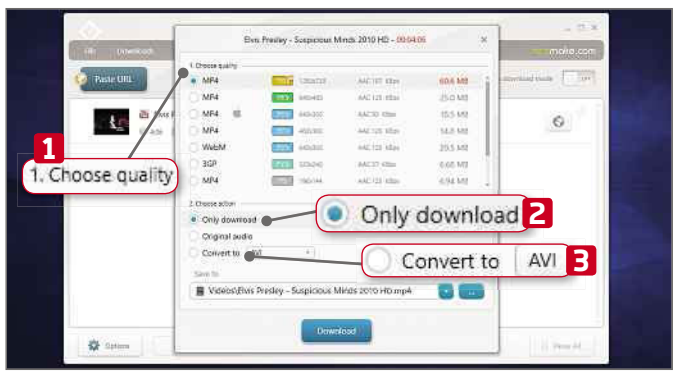
1 On the YouTube website, find the video you want the audio from and start playing it. Copy the address of the clip from the address bar in your browser. In Video Downloader, click the Paste URL button 1 and the video file appears below. 2



2 The download options pop up. To get the audio in its original format, make sure the 'Original audio' option 1 is selected in the 'Choose action' box. This will change the file type to M4A. 2 For audio downloads, it doesn't matter what you've selected in the 'Choose quality' section.



3 The file will default to being saved in the Music folder. Use the drop-down arrow to choose Videos, Documents or Desktop instead, or the '...' button to save it elsewhere. Click the Download button. A window pops up 1 and you can either Play the file immediately 2 or see it in its folder. 3



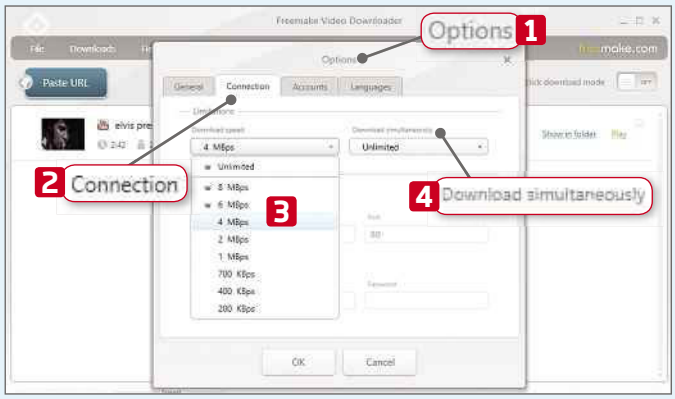
4 To download the video file as well as or instead of the audio, click the Paste URL button and select an option from the 'Choose quality' section. 1 To keep it in its original format, select 'Only download', 2 though you can also convert files to another format if you need to. 3



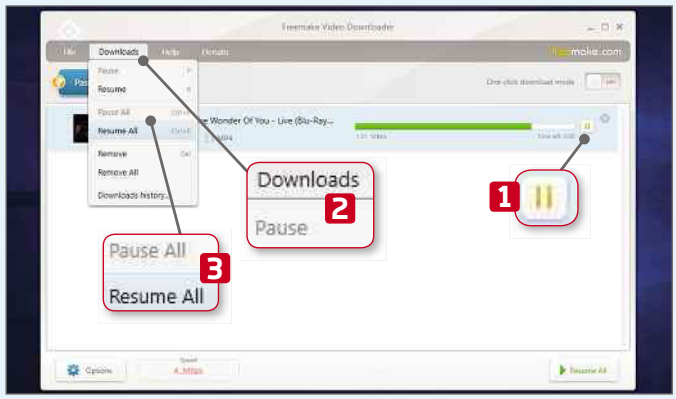
EXPERT TIP

Andy Shaw says

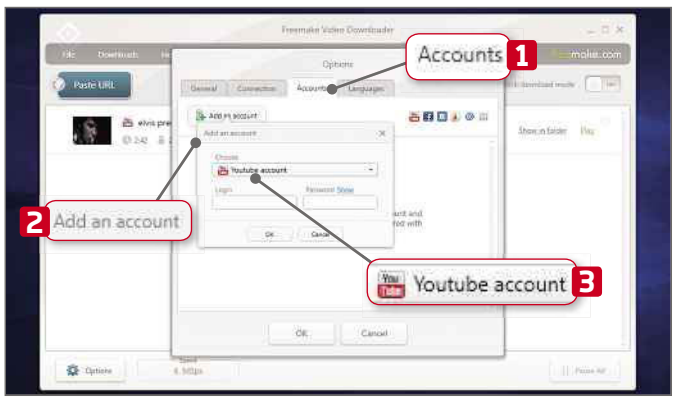
To bypass the unwanted extra software in the installer, we clicked 'I do not accept' to Nero TuneItUp. We found two instances where we needed to choose the 'Custom installation' option, and deselected both Install The Desktop Tool and Install Web Bar. We'd still advise you go through the options carefully when installing it yourself, because changes may be made to these options.



5 If you're downloading a lot of videos, you might want to limit the bandwidth used by the software, so you can still do other internet-related jobs on your PC. Click Options 1 and the Connection tab. 2 Choose a limit from the list. 3 You can also cut the number of files downloaded simultaneously. 4



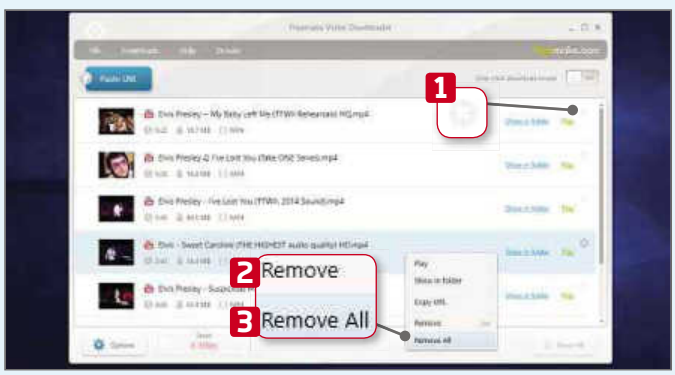
6 Temporarily pause a download by pressing the Pause button, 1 selecting the option in the Downloads menu, 2 or by highlighting the download and pressing the P key. The R key resumes the download. You can pause and resume all downloads simultaneously 3 from the Downloads menu.



7 You may not be able to access some videos without signing in if they have been privately shared with you or have an age restriction. In Options, click the Accounts tab, 1 then 'Add an account'. 2 Choose a type of account from the drop-down menu, 3 enter your login details and click OK.



8 If you're regularly performing the same type of download, click the 'One-click download mode' switch to On. 1 You don't get the same choice of settings and you can't download M4A audio, but it's handy if you regularly download lots of videos.



9 As you download more audio and video, the software will start to fill up. You can remove downloaded files from the software by clicking the cross, 1 pressing the Delete key or right-clicking. 2 The right-click menu also gives you the option to wipe all the downloads with Remove All. 3



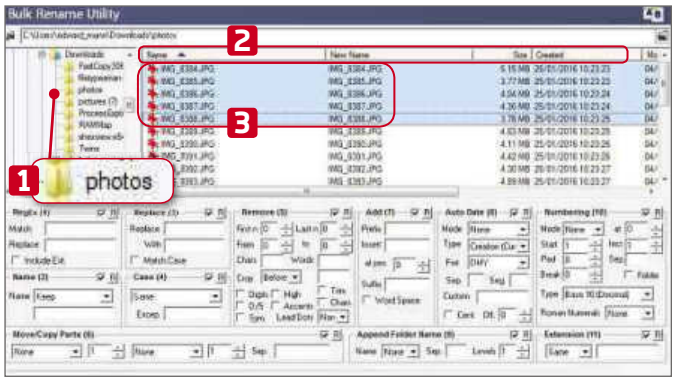
10 If you've cleared files from the program, you can still remind yourself of what you've downloaded. Open the Downloads menu and pick 'Downloads history'. 1 Choose icon or list view 2 to scroll through your downloads or search for specific files. 3 Right-click for more options. 4

Rename thousands of files in seconds

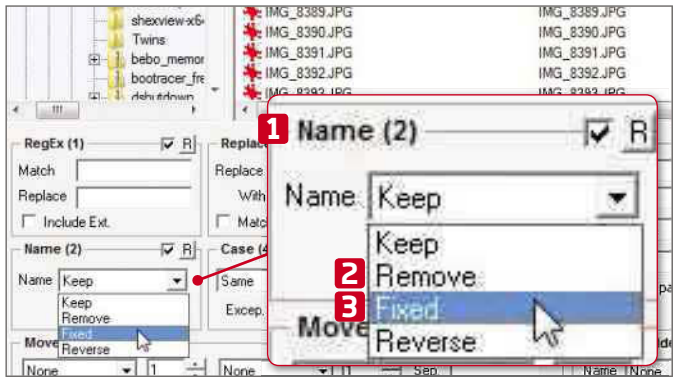


Renaming large numbers of files, such as photos, can be time-consuming and tedious, but Bulk Rename Utility completes the task in a matter of seconds. Its range of powerful tools lets you control every aspect of the renaming process, from auto-numbering to adding a date in a format of your choice. You can also copy your renamed files to a new location.

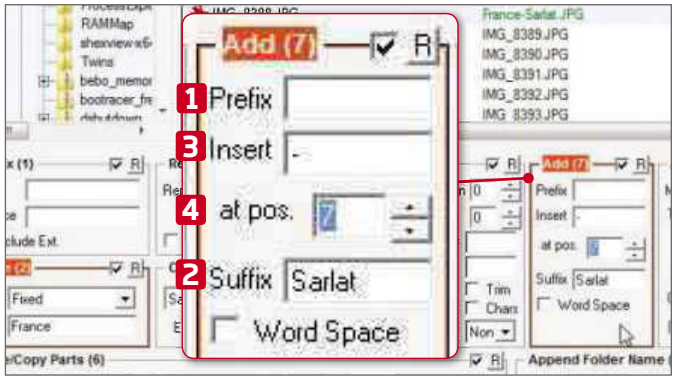
Bulk Rename Utility: bit.ly/bulk390 | **10 mins** | **XP, Vista, 7, 8, 10**



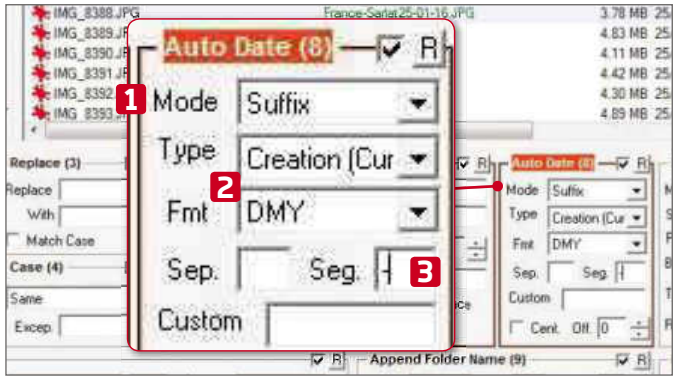
1 Install and run Bulk Rename Utility. Using the file tree, navigate to a folder containing the files you want to rename. 1 You can sort the contents by name, size or date created. 2 Highlight the files you want to rename 3 so their new names are previewed when you use the options below.



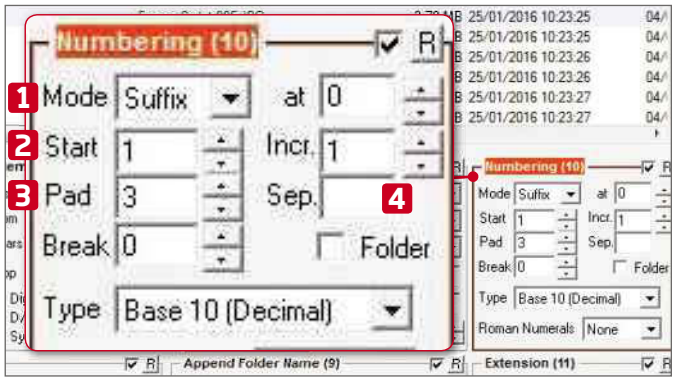
2 The Name option 1 lets you decide what to do with the original file names. Select Remove 2 to start with a blank canvas and delete the original names; or Fixed 3 to enter some characters to form the basis of your new file names.



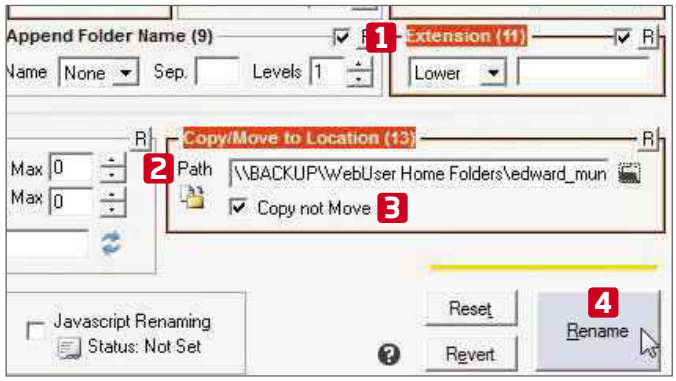
3 The Add option lets you add a Prefix 1 or Suffix 2 to your files names. To include a space between the words, tick Word Space. Alternatively, you can add a dash by using the Insert option 3 and altering the 'at pos.' value 4 appropriately.



4 To add a date, select Prefix or Suffix from the Auto Date section's Mode drop-down menu. 1 You can choose the date's format and how it's sourced using the Fmt and Type menus 2. To separate the date's elements, add a dash or other character to the 'Seg.' box. 3



5 If you prefer to number your files, choose a Mode 1 from the Numbering option, and a starting number. 2 Pad determines the number of digits, so entering '3', for example, would result in '001'. 3 Add a space to the 'Sep.' box 4 to separate the numerals from the rest of the file name.



6 Extension 1 is the only option that affects the file extension. To copy your renamed files to a new location, select a filepath in 'Copy/Move to Location' 2 and tick the Copy box. 3 When you're happy with the previewed file names, click Rename 4 and OK to carry out the changes.

Hide your private files and folders

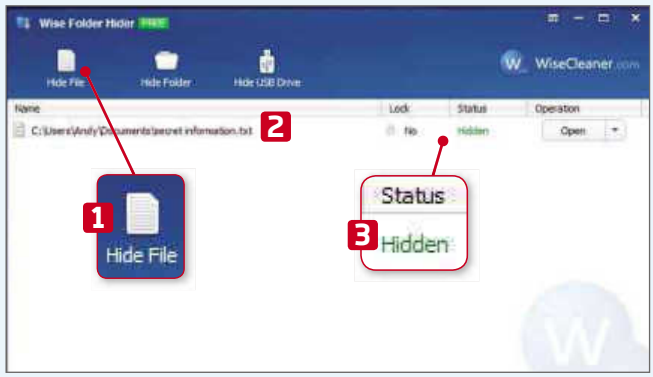


You may be generous enough to share your PC with your family but that doesn't necessarily mean you want them poking through all your files and folders. Wise Folder Hider is a free tool that can make files and folders invisible to anyone but you. To make them doubly secure, you can also lock both the files and the software with their own passwords.

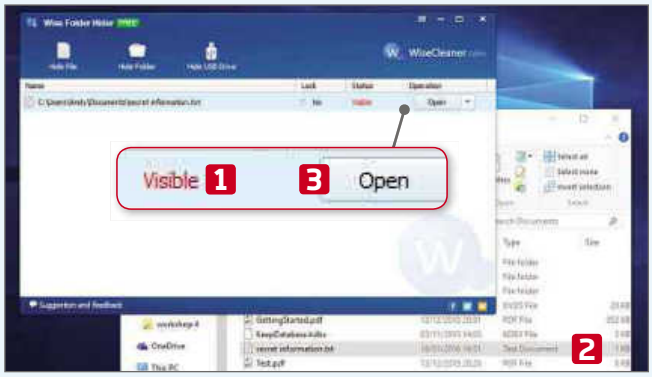
Wise Folder Hider Free: bit.ly/wise390 | 10 mins | XP, Vista, 7, 8, 10



1 Download and install the software but decline the offer to install any additional programs. You have to secure the software with a password, so make sure it's one you can remember. If you need to change it later, click the menu button 1 and select 'Change login password'. 2



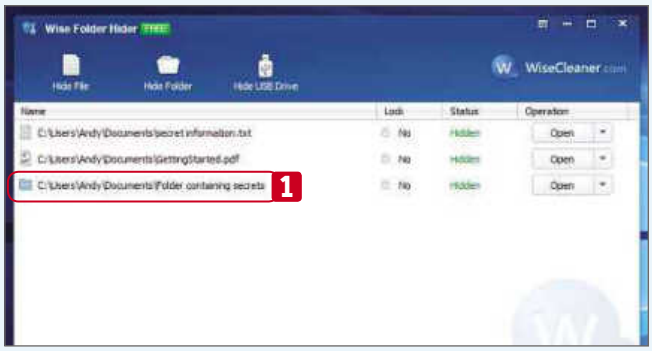
2 To hide a file, click the Hide File button, 1 select the file you want to hide and click OK. The file appears in the list of hidden files 2 and disappears from its original folder. The file's Status is set to Hidden. 3 You can also drag and drop files into this window.



3 To make the file reappear temporarily, double-click it in the Folder Hider software. Its status changes to Visible 1 and an Explorer window opens displaying the file in its list of contents. 2 You can also use the Open button 3 to bring up the same Explorer window.



4 From the same menu, you can select Set Password. 1 This lets you add another level of security by setting a password for the individual file. To remove a file from the software (so it's permanently visible again), click the Unhide option. 2



5 You can drag and drop entire folders 1 into the software, or just click the Hide Folder button and select the one you want to conceal. If you decide not to keep the software, make sure you remove everything from it before you uninstall or you might never see your files again!



6 The Hide USB Drive button 1 failed to keep our files hidden when we disconnected the drive, so it's best to follow the steps above and hide private files and folders manually. Make sure the same drive letter 2 is kept by only using the software when a single USB drive is connected.

Weekend Project

Get to grips with some serious PC DIY to boost your computer's performance

How to...

Get Android running on your PC

If Windows is sluggish, why not try running Android on your PC? **Wayne Williams** shows you how to do it

The most popular way to run Android apps on your computer is to use BlueStacks (www.bluestacks.com), and we explained how to get this up and running back in Issue 388. Remix OS (bit.ly/remix390) offers an alternative solution, and is essentially a full mouse- and-keyboard-friendly Android operating system for your PC. It runs directly from a USB flash drive, so you don't need to replace your existing OS or set up any kind of complicated dual boot.



What you'll need

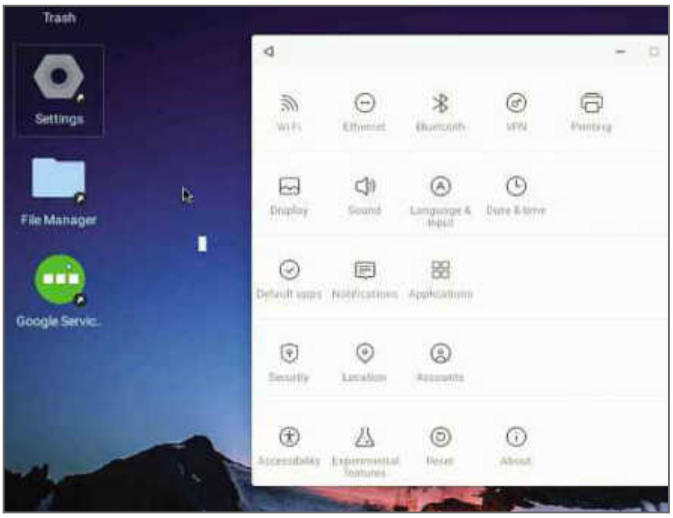
Remix OS has certain specific requirements, so it can't run on just any PC. At the time of writing, it only works on computers with a 64-bit processor, which rules out very old machines. It also requires a USB 3 port. If you try to run it on a lower version of USB, it may be slow to load and run.

The USB flash drive you use also needs to be compatible with USB 3, with a recommended writing speed of 20MB/s. It should have a minimum capacity of 8GB and be formatted in the FAT32 file system. Windows doesn't like to format larger flash drives in FAT32, so you might need to use a tool such as FAT32 Format (bit.ly/format390) to do this.

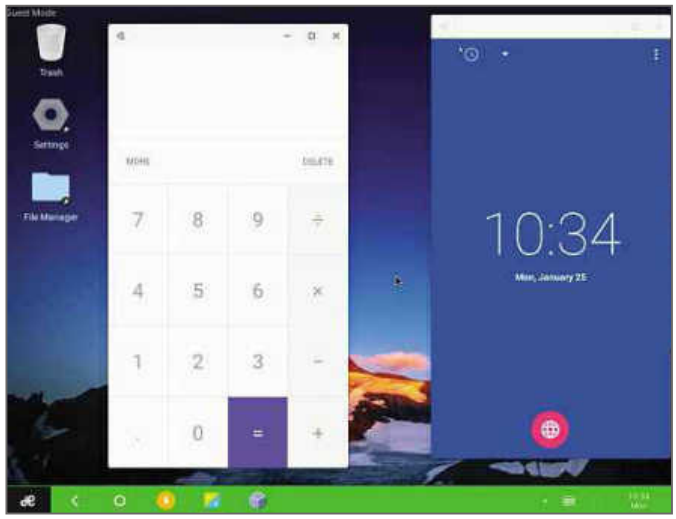
If your PC isn't suitable or you don't have a decent spare flash drive, but you still want to try Remix OS, you can do so using VirtualBox (www.virtualbox.org). You'll need to select a 64-bit OS when creating your virtual environment but we'll explain how to do this on page 61.

Get started

Remix OS is currently in alpha. That means it's a very early build and intended for developers and early adopters to test, rather than general consumers. That said, anyone can download and install it. You just need to go to the 'Download now'



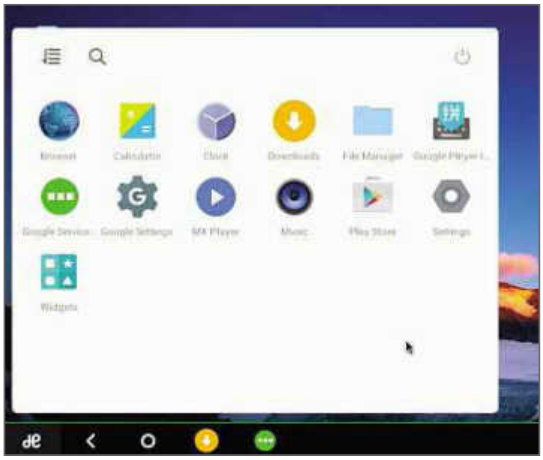
Click on the cog to access the settings which should be familiar from your tablet or phone



The standard apps provide a selection of handy tools including Calculator and Calendar apps

page on the website, read the message concerning how apps might run on non-touchscreen PCs and tick the option that says 'I am a developer and have read the above message'.

Next, choose the version of Remix OS you require. There are two options – Legacy and EFI – and you should pick the one that matches your PC. For older computers, select Legacy; for newer ones, try the EFI edition. If you're planning to run Remix OS in VirtualBox, you'll need to download the Legacy edition, because it provides an image file in the required ISO format. The EFI version uses an IMG file format. It's a sizable 700MB compressed file, so you have the option of downloading it directly or using torrent software. Choose the option that best suits the speed of your internet connection. We'll show you how to install and run it in the Mini Workshop, below, then guide you through your first steps in our Mini Workshop on page 61.



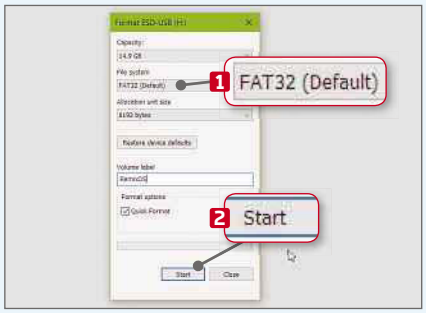
Remix OS comes with several apps pre-installed, just like the mobile version of Android

Download and install Google Mobile Services

In order to install other Android apps, you need to install Google Mobile Services (GMS) and be running Remix OS in Resident Mode (which saves any changes you make for the next time you use it). Open the Remix OS Browser and go to the XDA Developers Forum (bit.ly/gms390). Download GMSInstaller in APK format, then go into downloads and double-click the APK file.

Remix OS will be set to block the installation of apps obtained from unknown sources (as all Android devices are). Go into Settings and toggle Unknown Sources on, then return to Downloads and double-click the APK file again. Read the required permissions and

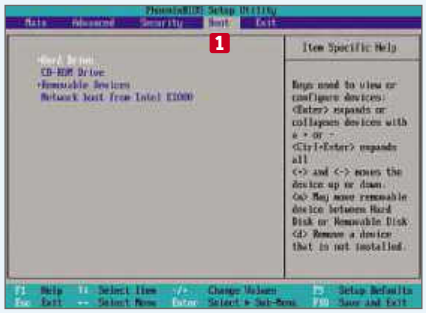
MINI WORKSHOP | Install and run Remix OS from a USB drive



1 Insert the USB drive into a spare USB port. In File Explorer, right-click the drive and select Properties. This will show you the current file system. If it's not FAT32, you'll need to reformat it. Right-click the drive and select Format. Choose 'FAT32 (Default)' as the file system 1 and click Start. 2



2 Unzip the Remix OS download to a folder on your hard drive and run the Remix OS USB Tool. Click the Browse button 1 and select the image file. 2 Use the drop-down box to select the USB drive to write the contents to. 3 Click the OK button 4 to start preparing the drive.



3 Restart your PC. Hopefully, the computer will boot from the USB drive but, if it doesn't, restart your PC and go into the settings by pressing the relevant key. Look for the boot sequence menu 1 and set it to load the USB first. Disable Secure Boot if it's enabled. Save the changes and exit.

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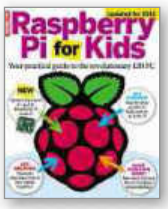
THE DEFINITIVE GUIDE TO FREE SOFTWARE



Free software can be a worry. Is it as good as a paid-for package? Will it sneak junk on to your PC? Does it nag you to update to a premium version? In our new 148-page book *The Definitive Guide to Free Software*, we recommend only the best free programs that deliver high-quality features and no nasty surprises.

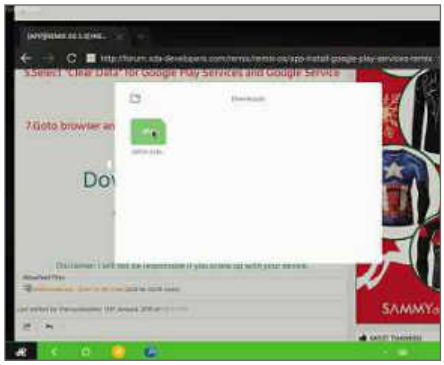
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RASPBERRY PI FOR KIDS

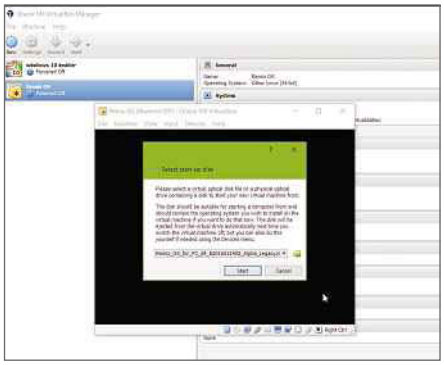


The Raspberry Pi is the incredible £20 British computer that's taking the world by storm. It's ideal for children of all ages to experiment with, play games and learn valuable skills. We've updated this 148-page book for 2015 to include instructions on mastering the new Pi models (A+ and B+).

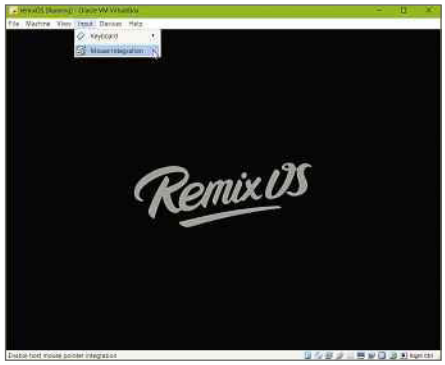
BUY IT NOW FROM AMAZON
at bit.ly/raspbook



To download apps from the store, you must first install Google Mobile Services



To try Remix OS on an older PC, try running it in VirtualBox



Remix OS uses a mouse rather than a touchscreen, so make sure it's recognised

click Install. Double-click the Google Services shortcut on the Desktop and, in the window that opens, click 'One-Click to Install Google Services'. It will download the required files and install everything.

Now go into Settings, Applications, Find Google Play Services and click the Clear Data/Cache options. Go back and find the Google Service Framework, then clear the data and cache for that as well. Reboot your PC and you should now be able to use Google Play, just as you can on your mobile device.

If you find you can't download apps, you might need to change the time zone in the Remix OS Settings so it matches your current location (if it doesn't already). If that doesn't work, try opening Browser, then search for Google Play Services and open the result in the Google Play Store (but don't click Install in the search results). Click Update.

When you add a new Google account, it may take a while to be accepted so wait a few minutes and try again. We found that getting this working is the trickiest part of using Remix OS.

Run Remix OS on VirtualBox

If your PC can't natively run Remix OS or you don't have a suitable spare USB flash drive, you can use VirtualBox. Install and run VirtualBox, then click the New button. Enter `Remix OS` as the name and select 'Linux' as the OS type. Choose 'Other Linux (64-bit)' as the version.

Click Next and set the memory size (half of your actual memory is ideal). Click Next again, choose to 'Create a virtual disk now' and click Create. Select VDI as the type of hard disk (the default), then select 'Dynamically allocated' for storage. For the file size, select 16GB and click Create.

The virtual drive will be created and appears in the sidebar on the left. Select it and click the Start button. Unzip Remix OS to a folder on your hard drive. In VirtualBox's 'Select start-up disk' window, click the folder icon and browse to the location of the Remix OS ISO file. Select it, click Start and wait for Remix OS to load. At the menu, choose Guest Mode (if you select Resident Mode, it will complain that it can't find the USB drive – because there isn't one – and then fail to load). Remix OS will now run and you can start using it, switching in and out of Windows as required (press the right-hand Ctrl key to come out of the virtual OS). Your mouse probably won't show up properly in the window, so go to Input in the VirtualBox menu and click Mouse Integration.

To resize the window, go to View and select Scaled mode. Drag the corner of the window until it's the size you want. You can also switch to full screen. ■

MINI WORKSHOP | Get started with Remix OS



1 When the OS starts, you'll be presented with two choices. You can boot into 'Resident mode' (all data and apps are saved) 1 or 'Guest mode' (nothing is saved after each session). 2 Select the option you require. When it loads, select English as your language and agree to the terms. The Desktop will then be displayed.



2 The Desktop contains three icons – Trash, Settings and File Manager. 1 There's a taskbar at the bottom of the screen. Click the Remix OS button 2 to access the installed apps. 3 These include Browser, Calculator, Clock and Widgets. The right-hand side of the bottom bar lets you manage keyboard input, Wi-Fi and notifications. 4



3 To install new apps, you need to have Google Mobile Services (see page 59). Once that's installed, click the Remix OS button and launch Play Store from the menu. Log into your Google account and accept the terms. You'll now be able to browse the store and install any apps. 1

NEXT ISSUE **How To...** Back up everything in Windows 10

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Web User's Top Tips

Our experts explain how to get your older software working in Windows 10

TOP TIPS FOR RUNNING OLD PROGRAMS IN WINDOWS 10

Run as administrator

Some old programs that don't work in Windows 10 can be fixed by running them in administrator mode. This is because, over the years, Microsoft has changed the way Windows works to tighten security loopholes, which older software was sometimes programmed to take advantage of.

There are two types of user account in Windows: standard and administrator. It seems counter-intuitive, but programs are always run in standard mode, even if you are logged in with an administrator account. To run a program in administrator mode, you have to specifically instruct it to do so. Find the program's tile on the Start menu (go to 'All apps' if you can't find it anywhere else), right-click it and select More, then click 'Run as administrator'. Click Yes in the User Account Control window and the program will run.



Right-click programs that won't work and try running them in administrator mode

Always run in admin mode

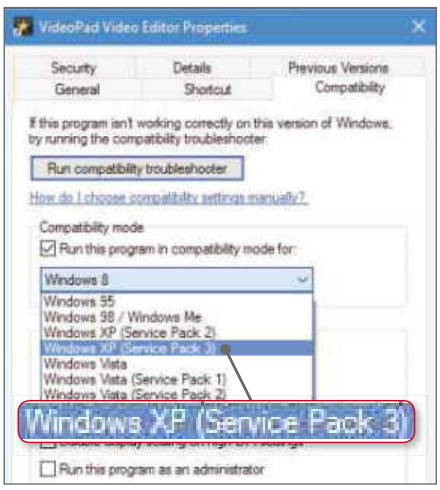
If you find that an old program only works in administrator mode – and you have tested it by right-clicking it and selecting 'Run as administrator' – you can set it to always run in this mode.

If you usually launch the software via a Desktop shortcut, right-click this and select Properties. Alternatively, go to Start, 'All apps' and find the program. Right-click it and select More, 'Open file location', then right-click the shortcut to the program in the Explorer window that opens. Select Properties, then the Compatibility tab. Tick the box next to 'Run this program as an administrator' and click OK to apply the setting.

If you see words that `look like they've been typed in a typewriter`, follow the instructions and type them exactly as they appear, paying close attention to spaces and punctuation.

Set the compatibility mode

An old program that won't run might work if you run it in Compatibility Mode.



Select one of the compatibility modes for a program, such as Windows XP

Windows 10 is able to fool programs into thinking they are running in an older version of the operating system. If a program only works in Windows XP, for example, it is possible to set the compatibility mode for that program to Windows XP.

Go to Start, 'All apps' and find the program. Right-click it and select More, 'Open file location'. Right-click the shortcut and select Properties, then the Compatibility tab. Tick 'Run this program in compatibility mode for' and select an earlier version of Windows, such as Windows 7. Click OK and run the program. If it doesn't work, return to the Properties window and try an earlier version, such as Vista or XP, and try it again.

Reduce the colours

High resolutions, 32-bit colour and other advanced capabilities in modern PCs can prevent old programs from running properly, and disabling these

elements can fix the problem. Find the icon on the Desktop – or go to Start, 'All apps' – then right-click the menu item and select More, 'Open file location'. Right-click the icon, select Properties, then select the Compatibility tab. In the Settings section, you'll find options to reduce the colour mode, run in 640 x 480 screen resolution and disable display scaling. One or all of these settings may need to be selected for the software to run. Set them and try running the program again.

Use 32-bit Windows

Your PC will either be running the 32-bit or 64-bit version of Windows and, if you upgrade, the corresponding version of Windows 10 will be installed. However, you can switch from one version to another by performing a clean install.

All modern software is designed to run in the 64-bit version of Windows, but if you still use programs designed for Windows XP or Vista, you may encounter compatibility issues by upgrading to the 64-bit version of Windows 10. If this is the case, you may prefer to use the 32-bit version, which ensures maximum compatibility with older software.

If you use any 16-bit software, which was common in the days of Windows XP, you will have to use 32-bit Windows 10 to run it, because the 64-bit version doesn't support 16-bit software.

Troubleshoot compatibility problems

If old software isn't running properly, you can sometimes fix the problem by using a troubleshooter. Right-click the Start button and select Control Panel. Click Troubleshooting, then click 'Run programs made for previous versions of Windows'. When the troubleshooter opens, click Next. It will search the computer (very slowly, so be patient!) for programs that might cause problems. If it finds solutions, simply follow the prompts to put them into action.

Try DRM solutions

SafeDisc and SecureROM DRM (digital rights management) were used on some CDs (usually games) in the early 2000s to protect them from piracy. Windows 10 won't allow them to run but you may be able to make them work in a virtual machine, such as VirtualBox, with Windows XP or Vista installed. Or you could buy the game again, but without DRM. Go to GOG (www.gog.com) and see if the game is listed. Lots of classic games are available at reasonable prices, many for less than £5.

TAKE IT TO THE NEXT LEVEL

More advanced tips for when you're feeling brave

Use VirtualBox

VirtualBox can solve several compatibility problems. It lets you use any version of Windows from within your current version, running the entire OS in a Window within your existing Windows software. If you have software that only works in Windows XP, you can run XP in VirtualBox, then install and run the software in the virtual machine.

Running two versions of Windows, such as Windows 10 and Windows XP, requires a lot of memory. It is just about possible with 4GB, but it will run better with more. Get the VirtualBox software from www.virtualbox.org and download the extension pack, too. Install VirtualBox, then go to File, Preferences, Extensions and click the button on the right to add the extensions.

Click New in the toolbar and select the Windows version you want to install from the Version list. It has them all from Windows 3.1 to Windows 10, in 32- and 64-bit versions where available. You can run a 32-bit version of Windows inside a 64-bit version of Windows 10. To install XP, Vista or 7, just follow the prompts. Increase the memory and hard-drive space settings if you need more, though.

Windows can be installed from a CD or an ISO file created from a CD. Versions up to and including Windows 7 can be installed and run for 30 days without a licence key but, if you plan on keeping it longer, you will need to purchase the full version. Full Windows XP, Vista and 7 discs are still available from a few suppliers. Do not buy the upgrade versions because they can't be installed in this way.



Use Windows XP, Vista or 7 in VirtualBox to run old software in Windows 10

Start the virtual machine with the CD or DVD in the drive to install it into VirtualBox.

Run DOS programs

You might want to run old MS-DOS programs on Windows 10, just for fun. There were some great games and applications that have long gone, but you can still find them by searching the internet. Go to DOSBox (www.dosbox.com) and click the Downloads link. Double-click the file to install it, then double-click the Desktop shortcut to run it.



To run ancient DOS software, you need a tool called DOSBox

Once DOSBox starts, you can't access your PC's hard drive. To get around this, open Explorer, click This PC, then the drive you want to view as C:\. Create a folder called 'dosbox' and put your DOS programs in it. In DOSBox, type `mount c c:\dosbox`.

Typing `c:` in DOSBox will now take you straight to that folder. Type `dir` to list the contents and type the name of the program to run it. To access the CD or DVD drive, type `mount d f:\ -t cdrom` at the command prompt.

Disable driver signing

Driver signing is a security system that helps to block malware but, because old software often uses unsigned drivers, it will stop it installing. This security measure can be disabled, but it makes the PC less secure, so it's not recommended. Click Start, Power, hold down the Shift key and click Restart. When the PC restarts, click Troubleshoot, 'Advanced options', Startup Settings, Restart. A number of options are displayed and pressing F7 restarts your PC with driver signing disabled.

Ask the Expert

Roland Waddilove, computer programmer and PC journalist since 1981, answers all your technical questions. Email us for help at webuser@dennis.co.uk



EMAIL

Get your AOL email in the Mail app

Q I would like to use Windows 10's Mail app to receive email from my AOL account. I can currently send messages through it, but only receive mail sent to my Microsoft account. I have imported some messages but would like all new AOL mail to appear in my Mail app. So far, I've only seen the following message: "Your Import was completed. Your email is now on outlook.com."

Darren, via email

A Most email services and software can be set up to fetch new messages from any email account, and having all your messages in one place is a good idea because it makes them easier to access. AOL is a well known email provider and it's easy to set up the Mail app or Outlook.com website to send and receive messages.

Open the Mail app and click Accounts in the left-hand panel. Click 'Add account' in the panel that appears on the right and, in the new window that opens, click 'Other account'. You are asked to enter the email address and your password, then the name you'd like people to see in the From box when you send messages. From now on, any messages sent to your AOL account will appear in the Mail app.



Add other email accounts to Mail to see all your messages in one place

EMAIL

Sending photo attachments

Q I am new to Windows 10. In the past, I sent photos to friends by attaching them to emails. Now, I can only send one at a time. I worked out a way to send more photos as small pictures, but I have to open the photo, convert it, save it, then go back to my email, click attach again and find the photo I'd saved. There must be an easier way!

Maggie, via email

A There are two ways to send photos via email. Start the Mail app and click New Mail on the left. In the new email window, click Insert on the right. You can then use either the Attach or Pictures buttons. If you click Pictures, you can select a photo from the hard drive to insert into the message. You can click it again to insert more pictures, but only one at a time.

Inserted photos appear in the body of the message, but attachments do not – all you see is a paperclip icon indicating that there is a file. To use this option, click Attach, select one or more photos and click Open. All the selected items appear as thumbnail images in the message. When the person receives it, they will see the familiar paperclip icon.

Both methods use full size images, and some photo files can be very large. People tend not to like emails with large attachments, so it's best to resize them. Go to Bulk Resize Photos (bulkresizephotos.com), open Explorer and find the photos you want to email. Drag them to the browser window and set the image size you want. The photos are resized and downloaded in a Zip archive. Attach the Zip to an email or extract the photos from the zip and add them to an email manually.



Use this online tool at Bulk Resize Photos to resize your images for emails

WINDOWS 10

Bring back the Start Menu

Q I recently upgraded my Dell Inspiron work laptop from Windows 7 to Windows 10, and now completely regret doing so. About a month after upgrading, I activated Cortana and promptly lost access to the Start Menu. I now have to use a folder I saved on my Desktop to access files and programs, which is an utter pain. I've tried the fixes suggested on the BT website (bit.ly/start390) but none have worked.

My company's IT support investigated the problem but haven't been able to fix it. They suggested wiping the computer and reinstalling everything, but I'm keen to avoid this. I'm hoping that you've come across this issue before and might have a solution. I don't recall seeing any letters or articles addressing this problem.

Mike Richards, via email

A Other people have experienced this problem, and there doesn't seem to be a single solution. Sometimes the problem goes away by itself after a while, so it's quite likely that a Windows update fixes it. In the meantime, you could use IObit Start Menu 8 (bit.ly/iobit390), which is designed to add a Start menu to Windows 8.

Another solution you could try is to right-click the Start button and select Command Prompt (admin), or open Explorer and go to C:\Windows\System32, then right-click cmd.exe and select 'Run as administrator'. At the command prompt, type `powershell`, then press Enter and type:

```
Get-AppxPackage | % { Add-AppxPackage
-DisableDevelopmentMode
-Register "$($_.InstallLocation)\AppxManifest.xml" -verbose }
```

Or copy the code from our Page-by-page links for Issue 390 (bit.ly/page390).

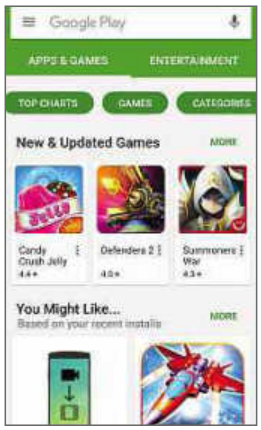
MOBILE

Android phone security

Q I use my Samsung tablet and Samsung S5 smartphone for emails, browsing the web and shopping, and I download apps from Google Play. I have had conflicting advice about whether I need to use a security app. I have Kaspersky Total and Kaspersky Internet Security on my PCs and find them easy to use. I've noticed that Kaspersky has an Android app that I can download using my Kaspersky product key.

Vic Cox, via email

A A virus is a program that attaches to or embeds in another program and spreads itself to other devices. Malware is a malicious program that can spy on you, steal your contacts and other info, and could con money from you via bogus calls and text messages. Technically, there are no Android viruses, but there is malware. If you only download well-known apps from reputable companies in the Google Play Store, and avoid brand new and unknown apps that have few downloads and reviews, there's little chance of getting malware on your Android device.



To avoid malware, stick to popular apps from the Google Play Store

You can download apps from outside the Google Play Store by changing the settings on your device. However, alternative app stores can include fake apps and cracked versions that avoid payment, and this is where most Android malware is found.

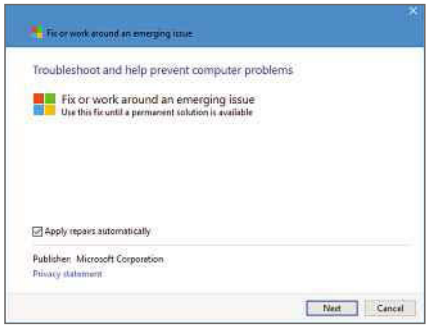
Android security software isn't strictly necessary, but it won't do any harm. Kaspersky Internet Security for Android is free in the Google Play Store, and the Premium upgrade unlocks extra features. As a Kaspersky user, you should get the Premium version for free.

WINDOWS 10

Settings and printer problems

Q I downloaded the free Windows 10 upgrade from Microsoft but, when I go into Settings, all I see is a blank black page. How do I solve this? Also, my HP Deskjet 500c printer no longer appears on my printers list. How do I get it back and make the printer work?

Mossie, via email



This troubleshooter can fix problems with Windows 10's Settings app

A A few people have had problems with Settings not opening in Windows 10 or, in some cases, opening the Windows Store instead. Updates to Windows now stop this happening but first you have to fix the problem. Go to bit.ly/settings390 and you'll see a link near the start of the text that downloads a troubleshooter. Download it and double-click the file in the Downloads folder (or wherever you saved it). This should cure the problem.

Your HP DeskJet 500c is so old that, according to the HP Computer Museum (bit.ly/museum390), it dates back to 1991. It's amazing that it still works! HP does not supply Windows 10 drivers because they are built in. Click the search box in the taskbar and type `devices`. Click 'Devices and Printers' in the search results to open the Control Panel. Make sure the printer is connected to the computer with a USB cable and click 'Add a printer'. Windows searches for a printer and the DeskJet should be listed. Just follow the prompts to install it.

SHOPPING

Buy a Windows 7 upgrade

Q I would like to upgrade my PC from Windows Vista Home Premium to Windows 7 Home Premium. Is it safe to buy an upgrade or a custom installation from the likes of Software Geeks (softwaregeeks.co.uk) or Coastal Software (www.coastalsoftware.co.uk)? My PC is able to run Windows 7.

John Southey, via email

A The broader question is how can you tell whether a company is trustworthy? Anyone can set up a web server and begin selling online, so how can you be sure that a company can be trusted with your credit card details and will deliver the goods?

A company's website can reveal a lot. Find an About page describing the company, and check its postal address, contact email, telephone number, and Help and Support facilities. It should have a well known and reputable payment system. You should also search for the company on Google or Bing to see if other people have used it and find out what their experience was. As far as we can tell, Software Geeks and Coastal Software are fine.

WEB BUILDING

Learn to build a website

Q I'm 17 and very interested in running my own website, but I'm wondering where to start. What would you recommend?

Ciarán Aherne, via email



Learn all about producing websites using the online courses at W3Schools

A Many sites use a content management system (CMS), and WordPress is the most popular. You can get a free WordPress site at wordpress.com and learn how to create pages and posts. No technical knowledge is required.

WordPress.com has its limitations, so once you've mastered it, sign up with a web hosting company that offers the self-install version of WordPress (wordpress.org) or other popular tools. It costs as little as £3 a month for a website.

To go beyond WordPress, you could consider learning HTML, JavaScript and PHP. W3Schools (www.w3schools.com) will get you started, or you could try a more interactive option such as Codecademy (www.codecademy.com).



This fortnight Roland has been developing his website – tweaking the templates and optimising it for mobile browsers

Your Top Tips

Our pick of the best advice from our readers. To get help or offer it to others, visit forum.webuser.co.uk



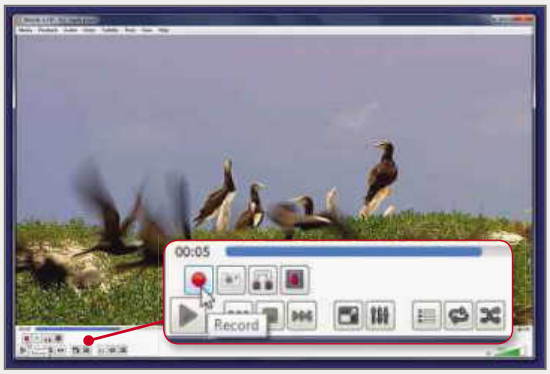
TOP TIP

Mug winner

SOFTWARE

Trim video clips using VLC

I'd been looking for a simple video editor for my laptop to cut sections out of clips and I've discovered that VLC media player (www.videolan.org) does it without any fuss. To use VLC in this way, click on the View menu and choose Advanced Controls, which opens up a small control panel. Open your video and press the red Record button when you get to the frame where you want the new clip to start. To choose an end point, simply stop the recording by pressing the red button again. VLC automatically saves the video in your Videos folder. How easy is that!



VLC's Advanced Controls let you trim the length of video clips

Simon Mellor, via email

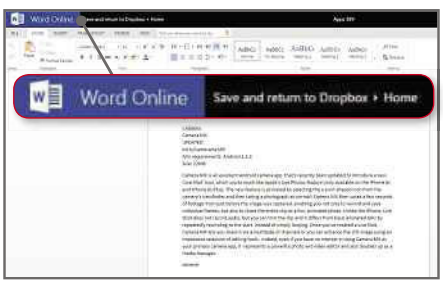
ONLINE STORAGE

Edit Dropbox files in Word Online

I sometimes save Word files to Dropbox. Last week, when I needed to edit one of my documents on a PC that didn't have Microsoft Office installed, I found a handy feature that lets you use Word Online without even opening a new tab.

To do this, click the title of one of your Word files. When the preview appears, select Open (or click the down arrow and select Microsoft Word Online if you're using a PC with Word installed) and it'll load in Word Online. Any changes you make in the web-based editor will automatically be saved and you can also use the File menu to rename the document or export it in a number of formats. Once you've finished, click 'Save and return to Dropbox' at the top of the page.

Unfortunately, I couldn't find a way to create a new Word Document but it's still an incredibly handy tool if you want to use Dropbox instead of OneDrive or Google Drive.



Dropbox's Word Online tool lets you edit documents on the web

Ed Wright, via email

WINDOWS 10

Recover lost devices

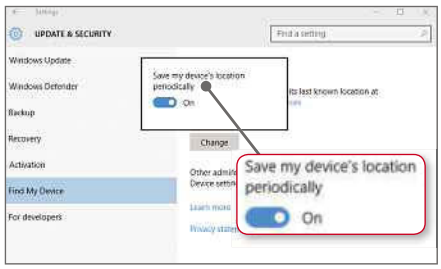
It's easy to misplace a phone, tablet or laptop. I recently left my phone in a cafe but I was lucky enough to get it back. If you're running Windows 10, however, you can see where your devices are at all times, which could help you find your lost or stolen kit.

You have to be signed into a Microsoft account, then you can turn on tracking by going to Settings, clicking 'Update & security', and then selecting Find My Device. If Find My Device is off, click the Change button and turn it on. That's it.

Whenever the phone, tablet or laptop is turned on, it stores its location in your Microsoft account. You can see where your kit is by going to account.microsoft.com/devices. If something is lost, you can zoom in on the map to see the street or even the building it's in.

If it's been stolen I wouldn't advise confronting the thief; call the police instead and tell them where it is.

Alan Dunn, via email



Find My Device stores the location of your devices in your Microsoft account

HARDWARE

Protect your smartphone's screen

I was very disappointed when I realised how easily the display of my new Samsung Galaxy S6 had become scratched. The scratches were very fine, superficial marks that could only be seen in a particular light, but I couldn't help being wound up by them since I'd taken such good care of the phone.

I didn't want to risk polishing the scratches, in case this made them worse, and I worried that adding a screen protector would undermine the phone's brilliant display. However, after trawling the web, I found some screen protectors made by a company called Spigen that had good reviews, so I decided to give one a try.

The company sells tempered-glass screen protectors for some handsets, but only has a plastic one for the Galaxy S6 (bit.ly/galaxy390). A pack containing two front protectors and one for the



Spigen sells a wide range of smartphone cases and screen protectors

back costs £6.99 and, although they are fiddly to apply, I've been really impressed with the results. In fact, I forget that the protector is there most of the time and I've found that it's also helped to cover up the old scratches.

Ian, via email

BOOKS

Get free Kindle books

Over the last year, I have signed up to several email services that offer free or bargain-priced Kindle books. I can highly recommend DailyFreeBooks (www.dailyfreebooks.com), which was the first to appear and, in my opinion, offers the best selection of British books.

Other useful sites I've discovered include The BookHub (www.bookhub.com), Book Gorilla (www.bookgorilla.com), Kindle Buffet (www.kindlebuffet.com), eReaderIQ (www.ereaderiq.com) and Book Basset (www.bookbasset.com). However, most of these sites are based in the US.

If you don't have a Kindle, you can still read free books by downloading the Kindle apps (bit.ly/kindle390) for your PC or mobile device.

FratPark, Web User Forums



Kindle apps are available for Windows, Android and iOS devices

SECURITY

Protect your Google account

With all the malware on the web, it's more important than ever to protect your email accounts. Gmail has a useful '2-step verification' tool, which means that whenever you log into your email, you are prompted to type a unique code that's sent to your smartphone. This extra layer of security drastically reduces the chance of anyone obtaining unauthorised access to your Google account.

To switch it on, visit myaccount.google.com, click 'Signing in to Google', '2-step Verification', then follow the instructions. You can choose to receive the codes via text, voice call or the mobile app. You can also decide whether you need to enter a code every time you log into a device or just the first time.

Simon Mellor, via email



Google's two-step verification generates a code when you log in from a new device

GENERAL PC

Find System Restore

Is it just my computer or is System Restore not on any menu anywhere? I don't have a tile on the Start menu and I can't find it in 'All apps'. I eventually found it, but its location isn't obvious.

Open the Settings app, click inside the search box and type `system restore`. Click 'Create a restore point' and a window opens with a button to open System Restore. Once opened, it works just like it always has – if you have a problem with your computer, you can go back to a previous restore point to fix it.

I'm not sure why Microsoft has decided to hide this feature in Windows 10. In Windows 7, it was in Start, All Programs, Accessories, System Tools – which made much more sense!

Mike Sheehan, via email

BROWSERS

Easy reading without ad-blocking

Some people use ad blockers to strip back websites to the content alone, so they are easier to read, but you don't actually need ad-blocking software to do this. I have an iPhone and an iPad and, when I see an article I want to read while browsing the web with Safari, I just tap the Reader View button in the top-left corner, which strips out everything except the page's text and images. You just get the content you are interested in without the ads, menus, buttons and everything else.

I've upgraded my computer to Windows 10 and have discovered that the Edge browser has a similar tool. Browse as normal and, when you find an interesting article, click the book icon on the right-hand side of the menu bar to enter Reader View. As on my phone and tablet, everything but the text and images is stripped out, leaving just the article. Both these options offer a cleaner display than any ad-blocking software I've tried.

Barry Ireland, vie email



Banish ads with Edge's Reading View. It makes for a cleaner, simpler web

SHOPPING

Qualify for Amazon's free delivery

If your shopping at Amazon comes to less than £20 but you want to qualify for free delivery, you might want to try the Amazon UK Super Saver Delivery Tool (bit.ly/super390). Simply enter the total value of your shopping basket and click Search. The tool suggests a list of items that could help you to reach the £20 spend that you need. Of course, delivery doesn't normally come to more than a few pounds, so if the total value of your basket is much less than around £15 or so, you might want to think about what else you need rather than ending up with something random. If you don't like the type of products suggested, there's a similar tool called FillerChecker (www.fillerchecker.co.uk).

Madeline and FratPark, Web User Forums



Find items on Amazon to make your order eligible for free delivery



Readers' Helpdesk

Our pick of the best solutions posted on our reader forums. Visit forum.webuser.co.uk – it's friendly and free!

WINDOWS 10

What should I do if my Windows 10 upgrade fails?

Q I haven't upgraded to Windows 10 yet, but I was wondering how I'd be able to reinstall the operating system if I have a major problem either during or after installation?

bob.gas, Web User Forums

A I've successfully upgraded about 15 Windows 7 machines to Windows 10, mostly to the original 29 July upgrade. I do, however, understand your concerns and would recommend creating a full backup of your hard drive and copying it to an external hard drive. Once you've done that, you need to create a recovery boot disk for your backup software, so you can boot into the recovery environment if Windows won't load. It's worth doing a test run with this boot disk to make sure you can definitely use it to the locate the backed-up files on your external hard drive. This should be the most reliable method of restoring your PC back to Windows 7.

If you don't have any problems, you can just create another backup along with the Windows 10 version of the bootable recovery disk. Alternatively, use Microsoft's Windows 10 Media Creation Tool to create a bootable installation drive (there's a forum post about it at bit.ly/media390).

If you need some advice about creating backups, I've posted tutorials for two different programs on the Web User Forums at bit.ly/macrium390 and bit.ly/easeus390. Both tools provide excellent free backup options, but if I had to make a choice I'd slightly favour Macrium. There's still no great rush to upgrade to Windows 10, so you've got plenty of time to get acquainted with creating backups before making the leap.

tornado, Web User Forums



Create a bootable Windows 10 installation drive using Microsoft's Media Creation tool

SECURITY

Will Windows Updates make my PC unstable?



You should install all Important Windows updates

Q After reinstalling Windows 7 on my PC, I noticed that I needed to download and install nearly 140 important and 53 optional updates. My PC engineer told me that Windows 7 is soon to be discontinued by Microsoft so I shouldn't worry about these updates. In fact, he said that they would have little positive effect on my PC and could make it unstable. Does this mean I should just hide all these updates?

Petrosky, Web User Forums

A I strongly disagree. You should download all the important ones and sort through the optional updates one by one. Windows 7 is on extended support until January 2020, which means Microsoft will continue to patch any security problems. Just because your computer isn't running Windows 10 doesn't mean it will suddenly become vulnerable to hackers.

I've found a PC World article at bit.ly/windows390 which, although a year old, contains plenty of valid information. If you need to install a lot of important updates, it might be best to tackle a few at a time.

Peru and Madeline, Web User Forums

SOFTWARE

Can I run Windows from a DVD?

Q I recently got a free bootable Linux DVD from a magazine which claimed that Windows users could access their hard drive using this disc, even if their normal OS wouldn't boot. This made me wonder, if I wanted a PC for just browsing the web, could I avoid malware altogether by removing the hard drive and running everything from a bootable DVD?

Castman, Web User Forums



You can run Linux from a DVD but it may not have the drivers to run your hardware

A What you suggest is feasible, although you won't be able to save anything (unless it's to the cloud). You need a PC with a good amount of memory, so it's quick to retrieve various parts of the OS from the DVD, and you would have to install any drivers and set-up Wi-Fi every time you start the PC. I've experimented in the past using a bootable Linux disk for doing all my financial transactions, which worked fine, but the one major drawback was I couldn't get my printer to work with it.

TheTechGuy, Web User Forums

Inbox

Star Email

Mug winner

A brief history of virtual reality

I write in reply to M Woolley in Issue 388 of *Web User* (bit.ly/webuser388), who asked for more information about virtual reality.

Virtual reality is not new; it's just a new name for stereoscopic or 3D still photography or video. Queen Victoria was invited to view stereoscopic photographs at the Great Exhibition of 1851. The London Stereoscopic Company started in 1854, under a slightly different name, and produced views from around the world. It ceased trading in 1922, although its name was brought back to life in 2008.

The original mahogany-and-brass cameras using glass plates gave way to smaller hand-held cameras using roll film and the Stereo Realist camera (pictured), which used 35mm film.



Fuji introduced the first digital 3D camera in 2010. Other 3D camcorders followed, but you do not need a 3D camera to produce 3D pictures, just a simple technique coupled with an open-source program called StereoPhoto Maker. This allows 3D images to be produced in almost all formats including MPO files that let you see the images on domestic TVs. It's only the ability to display everything on a mobile phone or tablet that is reasonably new.

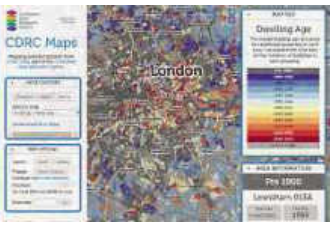
The Stereoscopic Society was formed in 1893 and has a vibrant and active membership that holds monthly meetings in Coventry and London between October and April each year, with displays of 3D stills and video, along with other 3D topics of interest. Seeing your own images digitally projected on a 7ft wide screen is an uplifting experience! The society holds an annual competition and publishes a full-colour quarterly magazine. It welcomes photographers who are both experienced and new to 3D, and help and advice is always available and freely given.

Remember, you don't need a 3D camera to start. Visit www.stereoscopicsociety.org.uk for full details.

John Peck, via email

The United Kingdom includes Scotland, too!

In reference to the 'Discover the age of your home' map (bit.ly/agemap388) in What's New Online in Issue 388. Yet again, you have published an article claiming that something covers the *whole* United Kingdom, when it does not. It took me less than 30 seconds to check three Scottish postcodes, yet you have two weeks between issues to check this kind of thing, so why don't you?



If you wish to continue selling your magazine in Scotland, perhaps you would at least have the courtesy and respect to check whether UK means UK, and alter your articles appropriately. Or else stop sending your magazine north of the border.

Simon Evans, Web User Forums

Robert Irvine, Deputy Editor says: Our sincere apologies to you and everyone else offended by this oversight. We should, of course, have said that the Dwelling Age map only covers buildings in England and Wales, and not Scotland and Northern Ireland. We promise to be more careful in future when referring to such data.

Stop droning on about Windows 7

All I hear is: "Windows 7, Windows 7, Windows 7". No-one ever says what exactly was so good about it.

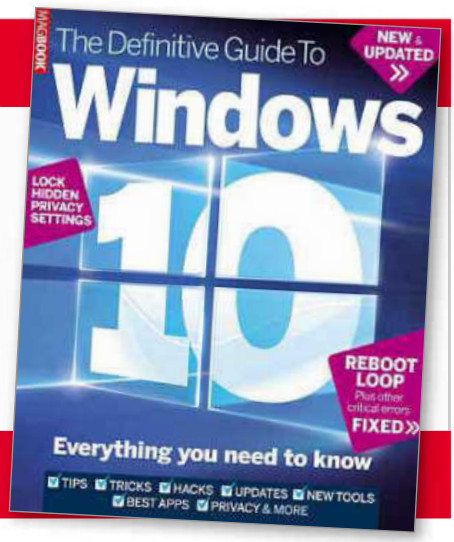
Get a grip, all you stuck-in-the-muds, Windows 10 is the future, just as the car has replaced the bicycle as our most popular form of transport. If you think that Windows 7 is better than 10, then you just haven't bothered to take the time to learn Windows 10.

For anyone who moaned about Windows 8: with a few clicks of the mouse, you can make Windows 8 look just like Windows 7. With a bit more tweaking, you can make Windows 10 look like Windows 7.

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Also, *Web User* should change its name to *Windows User* as there is not much if anything said about the beauty and simplicity of Ubuntu.

Stan the Man, Belfast

Windows 10 is like sliced white bread

If I could go back to Windows 7, I would. I never used XP, but if that's what people are happy with, then good luck to them. I'm fed up with snobs who say that Window 10 is the best thing since sliced bread. Well, white-sliced is not good for you and neither, in a lot of cases, is Windows 10. I've learned to accept some of it, while keeping a wary eye on its spying, and its tendency to reinstall apps apps I've got rid of and don't want back.



Martin Fletcher, Thorpe Hesley

My open letter to Microsoft

I thought you might like to read my draft letter to Microsoft:

"Dear Microsoft, I am an ordinary guy, not very technical, who uses his PC for browsing the web, keeping a few spreadsheets and sending emails. I used my old PC for years under Windows XP, with no anxiety whatsoever. I switched it on, it worked, I switched it off.

Then I bought a Windows 8 PC and upgraded to Windows 10 via 8.1. I've now spent days browsing on my tablet for help with restore points, Registry errors, refresh, reset, system image backup and file recovery media; and am trying to work out the differences between Windows Recovery actions and Dell Backup and Recovery actions.

This evening, I watched one of your Patch Tuesday updates install, then the screen went blank and stayed blank. My stress level went through the roof, for the umpteenth time. Please can you fix Window 10 so I can use it and have confidence in it, like I did with XP? I don't know how to fix it when it goes wrong so please don't break it. Please."



Brian Huddart, via email

There's more to life than Windows 10

I generally enjoy your magazine and have been reading it on and off for years. But I'd like to point out that many users intend to continue with operating systems other than Windows 10, which is mainly relevant to people with less knowledge about computers who are more likely to upgrade first (fools rush in and all that – no offence!).

I would welcome articles on topics such as encryption, which combination of browser security works best, and a good regime for backups. It would also be useful to read about an alternative operating system to Windows – one that is good enough to be used as a permanent replacement. Many of us are growing tired of Microsoft dictating what information we are forced to share. This is particularly true now that Microsoft is using undeclared content updates to control how Windows 10 (and 7 and 8, if we let them) will work in the future.

steve2003, Web User Forums

What a ridiculous way to Drive

Regarding your 'Best online storage services' feature in Issue 389. I can't believe you gave the *Web User* Gold Award to Google Drive. Didn't you read this news posted on the Google Apps blog last year (bit.ly/googleapps390):

"Beginning August 31, 2015, web hosting in Google Drive for users and developers will be deprecated. Google Apps customers can continue to use this feature for a period of one year until August 31, 2016, when serving content via googledrive.com/host/doc id will be discontinued."



It's ridiculous that *Web User* wasn't aware of this news.

Weasley104, Web User Forums

Andy Shaw, Technical & Reviews Editor says: Thank you for commenting on our article, and please rest assured that we were aware of the Google announcement. At *Web User*, we go into great depth when we review a program or service, and we note and take into account many elements, beyond what we have space to write about on the page. It all adds up and goes into the final analysis, even if it doesn't make it to the final write up.

Google Drive is a huge service with a massive range of features, and in a review of this size we can't talk about them all, so we focus on the key elements that we think are relevant to the review. We didn't believe that the ability (or not) to host a website on Google Drive was of particular relevance to this article, which was a comparative review of the services' online storage tools.

We therefore felt that the Gold Award was well deserved by Google, which provides a cloud-storage service that is, in our opinion, second to none, whether you can use it to host a website or not.

Leave your phone alone, Barry!

Regarding Barry Collins' column in Issue 389, 'There's no rest when you're roaming'. I have a suggestion for how you can stop people constantly messaging you while you're abroad: turn your ruddy phone off! If you're going to spend all your time checking your email and Facebook, then of course you're not going to get any peace.



Cheap roaming deals are meant to provide a safety net for when you need to use the web in another country. That doesn't mean you have to stay online all the time, just to get your money's worth. Personally, I love being able to leave my phone behind when I'm on holiday and the relentless beeping of other people's phones drives me to distraction. I know Barry is just a disembodied head in a bubble (according to his photo), but there are times when you have to keep your hands off your device.

George Dawson, via email

Where Friends Reunited went wrong

If there's a lesson to be learned from the demise of Friends Reunited, it's this: on the web, greed is not good. Once all its millions of users saw that there was

another site (Facebook) that didn't charge you a fiver just to message your schoolmates, they scarpered. Friends Reunited had no way to justify that amount (admin costs? Don't make me laugh!) –they got greedy and, by the time they scrapped the fee, it was too late and everyone had left.

People don't mind paying a couple of quid if they're getting a premium package but Friends Reunited offered the same rubbish to everyone. Hopefully, other websites won't repeat the mistake and will give their users a decent deal.

Joel Manning, via email



The more we use computers, the less we learn

Following the comments in your Inbox pages about update problems with Windows 10, it seems that we will never learn. For one, what are these companies actually downloading to us – some new form of spyware? And will these downloads really help our computers? We can only rely on the makers, and trust these days has to go a long way. But let's also look at the long-term effects – and not just on us, the older generation.

There are children in 2016 who will come out of school unable to read or perform simple maths; skills that would be essential if computers weren't there to do the work for them. And computers are making jobs more menial and tougher to find. Working in a pub involves little more now than pulling a pint and pressing 'pint' on the till.

We are slowly but surely losing our ability to think. Why write a letter when you can text? And texts are barely written in English: ask a teenager to write a sentence and half the words will be wrongly spelt.



I don't think children should use computers in schools until they can produce the written form on paper. If we as a race are going to progress, we have to be allowed to make mistakes because that is how we learn. If computers don't make mistakes, how can they see future possibilities in the way a person can?

Terry Bradley, Milton Keynes

What you say...

WHY DO YOU THINK PC SALES ARE PLUMMETING (bit.ly/sales390)?

Because smartphones and tablets are taking over, and they last longer now.

Gary Olsen *@Gary_Olsen*

Docking stations let you dock a tablet or ultrabook to a TV or monitor. Space is limited in a lot of homes. You don't need a tower PC for high-performance computing these days.

Chris Armstrong

Once you have one, there's very little need to upgrade unless you're a serious gamer. And older operating systems work fine.

Roger Whitcomb *@milairpix*

Because it can't fit in your pocket.

Colin Wallace

Tablets and phones have made simple tasks such as email more efficient.

Jason Smith

SHOULD BT BE BROKEN UP TO IMPROVE THE UK'S BROADBAND?

Nope. Whoever owned Openreach would carry on. Better to force BT to do a better job through legislation.

Ian *@Hemeloid*

No. Improvements have come from the commercial aims of BT, plus investment.

mike *@drifter104*

If it's not broke, why fix it? As long as it's not bought by Sky.

Ady Colclough

Something needs to be done because BT is underperforming.

tyson pashley *@tysonpashley*

FRIENDS REUNITED IS CLOSING. DID YOU EVER USE IT TO TRACK DOWN PEOPLE?

Yes, I found my first girlfriend on it. I should clarify that she was my girlfriend from 1981 to 1982, not at the time I found her on Friends Reunited!

Dave McAlister *@dpmcalister*

Yes, I even found my Dad on there after 30-odd years. We're still in touch, and he gave me away at my wedding last year. Both on Facebook now!

Caroline Alderson

I got in touch with some old school and university friends on there. Its biggest mistake was to charge a fee.

Sarah Cooper

I signed up and had a search, but then MySpace took over and social networking was born.

Simon Mellor *@Simon9Hops*

I used it for a while, got in touch with some old school friends and then we all migrated to Facebook.

Lee Dodgson

WHAT ANNOYS YOU MOST ABOUT MISLEADING BROADBAND ADVERTS?

I've seen adverts offering free broadband for the first six months, but you still have to pay line rental. So it's not free. You have to read the small print.

Gwyn Griffiths

The alleged speeds. We never get anywhere near what is advertised.

James McGinnis

Those so-called introductory prices which don't tell you the line-rental cost. With 'free' offers you'll still end up paying at least £18 per month.

Martin Phillp

That they can still get away with 'up to' speeds, and that the price you will pay after the offer ends is in small print that can be difficult to read.

Dean Stockton

Page 404



Barry Collins is staggered by the money being wasted on social networks

Money can buy you friends, but at what cost?

So farewell then, Friends Reunited. Sixteen years after it launched and roughly 15 years since anyone last bothered to visit it, they've finally decided to switch off the site that arguably set the entire social-networking bandwagon rolling.

That Friends Reunited even managed to keep going for as long as it did is nothing short of miraculous. It was the ultimate one-hit wonder: head online to discover all the school chums you'd lost touch with over the years, pay your fiver to get their contact details, then swiftly realise that the reason you lost touch with Gary from 5G is that you didn't actually like him in the first place. Once you'd chuckled at the fact that the school bully was now a Trainee Trolley Retention Operative at Tesco, and that Steve from 4C had married and divorced Suzie from 3F, Friends Reunited retained as much long-term appeal as a second-hand Murray Mint.

Unbelievably, the idiots in pin-stripes continued to fall over themselves to throw money at the site. Friends Reunited had well and truly peaked before 2005, but that didn't stop ITV spending a ridiculous £175m to buy it. Even four years later, with Facebook well established as the go-to site for voyeuristically monitoring the hair loss and expanding waistlines of your classmates, ITV still managed to tempt DC Thomson to pay £25m to take the wreckage off its hands, before it was finally offered back to the original founders.

> "Friends Reunited had well and truly peaked before 2005, but that didn't stop ITV spending a ridiculous £175m to buy it"

Still, nobody's spending silly money on social networks anymore, are they? No, they've upgraded to spending obscenely stupid amounts of money on them, instead. In 2013, Facebook paid $1bn to acquire the photo-ruining, selfie-addict's social network of choice, Instagram. Still, that's just loose change at the bottom of Mark Zuckerberg's drawer. A year later, Facebook slapped a cheque for just shy of $20bn on the table for teenage text-messaging service, WhatsApp, even though its only sources of revenue were a smattering of ads and a $1 annual user fee – both of which Facebook have just abandoned, meaning the $20bn app makes no money whatsoever.

That said, both of these hugely expensive, loss-making apps were strategic purchases for Facebook. When your company is worth in excess of $250bn, it's arguably worth spending a $1bn here or $20bn there to ensure that potential competitors can't steal your lunch. But when you consider the actual sums of money that are being wasted on these networks – which are every bit as fragile as Friends Reunited – it's enough to make you weep.

WhatsApp's $20bn price tag is more than the net value of Centrica, the company that owns British Gas. It would be just enough to buy Hewlett-Packard or Tesco – huge multinational companies with thousands of staff that have been going for decades.

Zuckerberg recently announced plans to give away 99% of his Facebook shares – about $45bn worth – to good causes. Perhaps the next time he's signing an 11-digit cheque for a rising competitor that nobody will remember in a decade's time, he'll decide that the money would be better spent on eliminating poverty, basic healthcare or any of the other admirable causes he plans to give his money to, rather than just buying more 'friends'.



Illustration: Andrew Torrens

+ Do you agree? Let us know at webuser@dennis.co.uk

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FOR MORE INFO SEE PAGE 62

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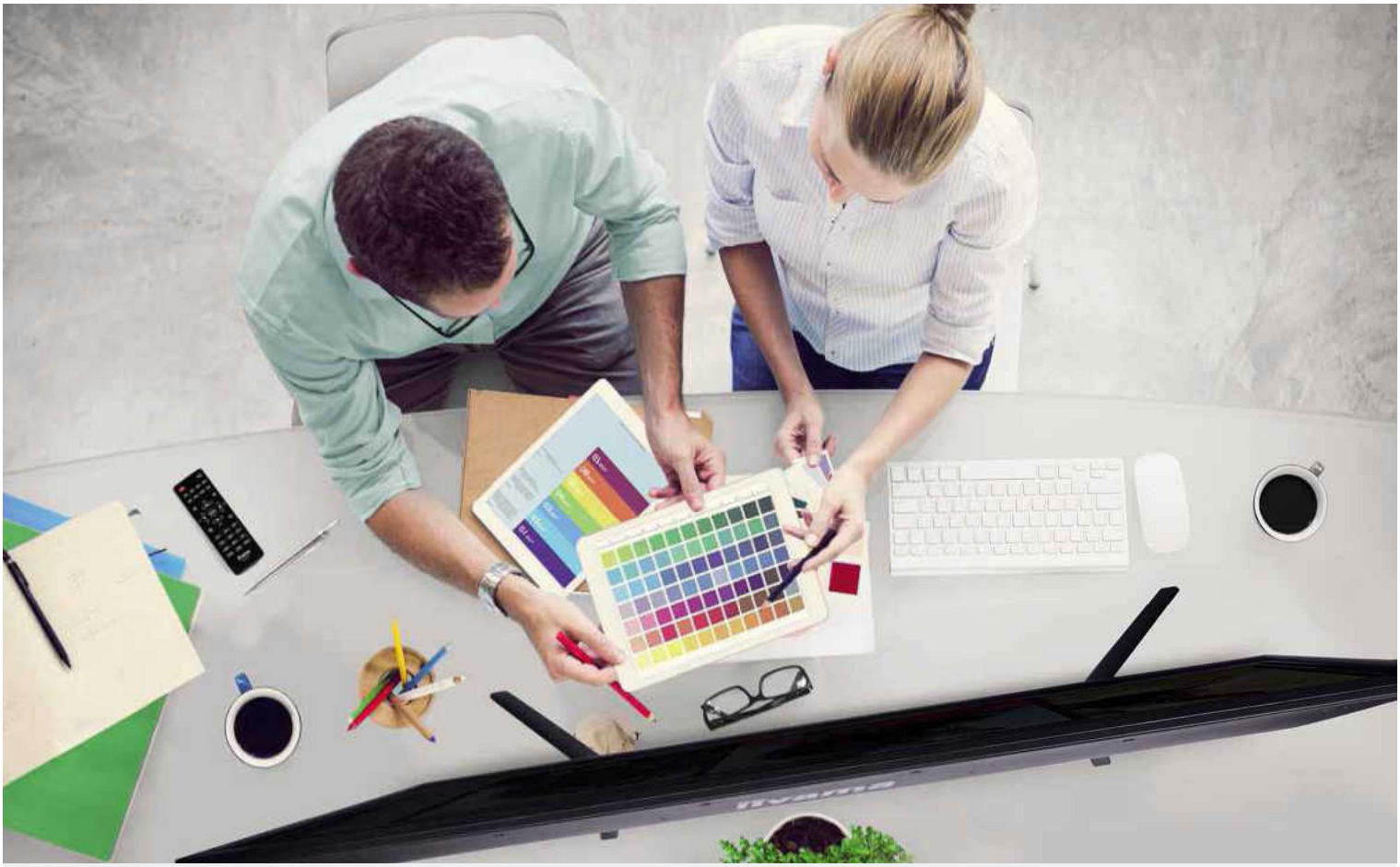
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